S. Hrg. 101-80

ONONDAGA LAKE RESTORATION ACT OF 1989

HEARING

BEFORE THE

SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION, AND INFRASTRUCTURE

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

S. 27

A BILL TO ESTABLISH A FEDERALLY SPONSORED PROGRAM FOR THE RESTORATION, CONSERVATION, AND MANAGEMENT OF ONONDAGA LAKE IN ONONDAGA COUNTY, NEW YORK, AND TO PROVIDE FOR THE SHARING OF COSTS OF SUCH CLEANUP, AND FOR OTHER PURPOSES

APRIL 27, 1989—SYRACUSE, NY

Printed for the use of the
Committee on Environment and Public Works

U.S. GOVERNMENT PRINTING OFFICE
98-966 WASHINGTON : 1989

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

S321-18

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ONONDAGA LAKE RESTORATION ACT OF 1989

THURSDAY, APRIL 27, 1989

U.S. Senate,
Committee on Environment and Public Works,
Subcommittee on Water Resources, Transportation,
and Infrastructure,
Syracuse, New York.

The subcommittee met, pursuant to notice, at 9:30 a.m., in the Common Council Chambers, City Hall, 300 East Washington Street, Syracuse, New York, Hon. Daniel Patrick Moynihan (chairman of the subcommittee) presiding.

Present: Senator Moynihan.

Also present: Representative Walsh.

OPENING STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, U.S. SENATOR FROM THE STATE OF NEW YORK

Senator **Moynihan**. A very pleasant good morning. I would appreciate it if you would take your seats so that we may begin.

I am not Jim Walsh; I am simply sitting in Jim Walsh's accustomed chair. I am very pleased and honored to do so, and to be here for the first of what will be several hearings in this session of Congress.

Stated formally, this is a hearing of the Subcommittee on Water Resources, Transportation, and Infrastructure of the Committee on Environment and Public Works of the United States Senate. We are meeting here in the Common Council Chambers. I would like to thank the members of the Common Council for making it possible for us to be here this morning.

Our subject is Onondaga Lake and the efforts which are being made and continue to be made at an even greater level to clean up the lake after centuries of abuse.

I think many of us saw the Post-Standard article this morning about a conference that was held in Liverpool. There is a picture of a van with a large sign saying, "America's Most Polluted Lake—Onondaga." No distinction, of course.

It is just 30 years since our family moved to Syracuse. I came here to teach at the University in 1959, having served four years on the staff of Governor Harriman of New York. These are special moments for us. Our youngest son was born here, in a snowstorm. I am happy to report that in three weeks' time he will have finally graduated from graduate school.

I remember being struck by what I would call the political structure of the city of Syracuse and Onondaga County, with the energies of the Harriman administration succeeded by those of Governor Rockefeller. How very different it was here not just with respect to government, but with respect to other institutions. I think it can be said that the people of Syracuse expected very little of government, and got little. They expected nothing of business, and got nothing. And they thought it was kind of a good idea to have as little as possible to do with the University—a great university—and that was as little relationship as was possible. And with respect to public representatives, they were expected to go wherever they went and vote against anything in government that was proposed the government might do. And that is how they voted, and nothing got done.

I would make an exception of John Hughes, who was an extraordinary State Senator, but they were otherwise an eminently forgettable lot. In the process, they let a crime take place. They let Onondaga Lake be wrecked. They turned it into what it technically is now: a toxic waste bin, this beautiful place which is bordered by Hiawatha Boulevard. They turned this lake into a toxic waste dump. They let a particularly rapacious corporation dump poison in that lake until there wasn't any room, and they got up and left without so much as a "thank you, ma'am." It was an extraordinary dereliction and it is going to take generations to remediate. We can do it; we mean to do it.

I introduced a bill, S. 27, to set up a management conference to provide funds. My colleague has done the same on the House side, and we will work this legislation and possibly pass it.

The important thing, though, is that we have the management in place, and the money is going to come from local, county, State, and national levels. Money can be had and the job can be done, but in the end the energy will come from this city and from this county or it won't happen.

I am particularly pleased to have as a representative a new generation of political leaders of New York State, and I have memories of when I arrived in Syracuse 30 years ago.

I will turn the microphone over to my colleague, Congressman Walsh.

OPENING STATEMENT OF HON. JAMES T. WALSH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Mr. WALSH. Thank you very much, Senator, for your kind remarks.

Mr. Pirro, County Executive, fellow Syracusans, it is a great morning to be back in Syracuse again, especially in these august chambers.

Senator, your continued leadership on a difficult issue is to your credit and a credit to the commitment you made on this matter years ago. I want to commend you again publicly for your efforts on behalf of this community. At the same time I would be remiss if I didn't also thank my colleague in the House, the Honorable Henry J. Nowak of Buffalo, who chairs the Subcommittee on Water Resources. Congressman Nowak met personally with me in his office to discuss my bill—and indeed, I have the bill, H.R. 2068, with me today—and he agreed to hold a hearing in Washington this summer on this issue. This is another significant step in building our case for the passage of this legislation.

I also look forward to working with you, Senator, over the weeks ahead on the Washington hearings.

Now to get to the crux of this matter, what is so important about cleaning up Onondaga Lake? There are very few of us, if any, who remember the lake as anything but a chemical bin. We don't take our families there for a swim. We don't depend on the lake for drinking water. If we fish there, we don't eat the fish. We have come, generation after generation, to discount the lake as a cesspool. It is the butt of all jokes. We have come to accept it as one of the most polluted pools on the face of the earth.

It may be hard to believe, but we can change all that. This meeting today is very important; it is not just another meeting about cleaning up Onondaga Lake. It's very possibly the beginning of a dream come true, but only if we here in central New York show the people in Washington that we have the will to do something which seems impossible. We can bring this lake back, not just for ourselves in economic development, but for the earth. And to prove something to ourselves, that when we work together we can overcome great obstacles—obstacles that, quite frankly, stand in the way of our survival.

I am sure many of us remember when ecology was the number one conversation in college. What became of our idealism? What gains have we made? Is the air fresher and the water cleaner? Back then, Lake Erie was considered dead; now it's almost clear of chemicals; the fish are back, and one of the Great Lakes is back to being great again.

We in central New York have a chance to take up a similar challenge, to show our commitment to the environment, to create a model for others to point to as an example of dedication to a cause. We have to show the will, we have to find the money, kick and scream for the money; if we have to, we must beg and borrow. There is no greater common purpose in central New York than protecting our air and water, our environment. The money, if it comes from the Congress, will not be enough. The developers have to be conscientious; the city has to watch waste water treatment sewer overflow, and that's the same for the county.

While we stand here today agreeing that government must do more, let's be honest. When we finally find the money to clean up this lake and hold it up as an example of what can be done, we really have to rely upon ourselves—our community—to change our habits, to teach our children to treat the earth like the living entity that it is, not as a garbage can to be replaced when it is full.

Today can be a real beginning. We are taking all the work that has been done so far by the conscientious people who have not given up on a dream of making Onondaga Lake not only usable, but truly beautiful. The lake has been an economic blight and a psychological barrier for our community. It doesn't have to be that way for our children and grandchildren.

Senator Moynihan, I thank you once again for your efforts, and I promise you I will do whatever I can on the House side to help this be a success.

Senator **Moynihan**. I thank you, Representative Walsh.

I might just say for the record, it is a relevant fact that Representative Nowak of Buffalo is Chairman of the Subcommittee on Water Resources in the House, and I am Chairman on the Senate side.

Now to our distinguished witnesses. I will just follow the rule of the order in which people appear on the list. We will begin with the very distinguished Mayor of Syracuse, the Honorable Thomas G. Young.

STATEMENT OF HON. THOMAS G. YOUNG, MAYOR, CITY OF SYRACUSE, NEW YORK

Mayor YOUNG. Thank you very much, Senator Moynihan. It is a very special delight for me to join with County Executive Nick Pirro in welcoming two Syracusans back to Syracuse.

Jimmy, welcome back.

I might mention, Senator, there are those who suggest that there are life cycles which swing back and forth. Should that be the case, and after you have made your full contribution in elevating the level of performance of the distinguished body in which you serve, the United States Senate, and having done all you've done to make the United States Government a better-functioning entity, perhaps you'll return to Syracuse in your retirement and run for a position on the Common Council.

Pat, I think there is also a very beautiful irony in contrasting the position of those institutions you referred to earlier, of whom little was expected 30 or 40 years ago, and who gave very little. It is those very same institutions who are coming together and offering the promise of this effort. And I would like to acknowledge the presence of Bill Donlon, who represents the private sector, and their contribution to the effort.

As everyone knows, I am here to express my absolute and unqualified support for S. 27. As was pointed out by your able staffer here yesterday to a group of distinguished citizens, that is a very significant number for the Onondaga Lake Restoration Act of 1989.

If you would allow me, I would like to explain the importance of S. 27 as I see it from my perch. First of all, the timing couldn't be better. Despite the fact that the lake clean-up is scandalously overdue, at this moment the State, county, and city governments are moving in concert with private business to realize the promise and potential of Syracuse's lakefront resources in a way that was unimaginable until now.

The lake's story begins as a great American adventure tale, with the proud Onondagas of the Iroquois Federation having their first encounter with Europeans in Jesuit missionaries. Later, a single, enterprising trapper settled here who happened to tell some customers near Albany the story about our salt. Typical of American stories, this one has a grand epoch of industrial expansion, but it ended with the moral that progress can be a cruel hoax. And that moral had plenty of echoes down through the city's 20th century chapter.

Manufacturing dried up or packed up. If it had only been the lake, there might have been more momentum earlier to clean it up; but the whole area of the city between downtown and the lake was the same ugly, shameful story of failure and neglect to plan and marshal our resources for future generations.

Just off I-690 on the way to the State Fair was the abandoned New Process Gear Factory. It looked completely bombed out. When I first took office my personal goal was to remove that hulking ruin from the landscape, to demolish it. But even as I saw the wrecking ball swinging in my mind—and I was feeling pretty triumphant about that solution—someone had the vision of acquiring that disaster and renovating it as class "A" office space. Even more miraculously, a little more than a year after being acquired from the city, the building is now beautiful. It stands alongside Onondaga Creek as Bridgewater Place. It is an astonishing example of what can be accomplished. And it is indeed a "bridge" for all of us who can't make a leap of faith into the city's future.

Part of that future is the lakeside development undertaken by the Pyramid Companies in building Carousel Center. This 1.4 million square foot shopping center is expected to attract customers from throughout New York, as well as parts of Canada and Pennsylvania. Its design anticipates a lake that is no longer an ecological embarrassment, with space for community gatherings that feature views of the lake and lake tours. The Carousel Center is especially important to the future of Syracuse as a "city on a lake" because its payments in lieu of taxes and its IDA payment will be reinvested to jump-start further development.

The city has already done this with charming effect in the Franklin Square area alongside Bridgewater Place. Part of the appeal and potential of the area was in the historic character of some of the older buildings. By imposing design standards, the city could emphasize and protect the "old town" look in the residential and office space there that is to be developed.

A number of existing businesses have invested in restoration projects on their buildings in the enthusiasm of the moment. For its part, the city has undertaken a massive infrastructure program that includes new streets, brick sidewalks, and gaslight-era street lights, as well as a creekwalk that will eventually extend from Armory Square downtown right to the lake. Along the way it will pass what today is the State Barge Canal's maintenance terminal. The city expects, critically, to acquire it from the State and, with the pilot payments from the Carousel Center, to convert it for recreational and development purposes. Plans include a marina, parks and walkways, and a dockside restaurant.

As an aside, Senator, in 1986 the American Wind Symphony's Floating Stage stopped and gave several performances in Syracuse en route from Buffalo to New York Harbor for the Statue of Liberty extravaganza. It came through all the locks of a narrow canal to get to Onondaga Lake, and then could dock no closer to Syracuse than Longbranch Park—at the extreme other end of the lake—because the city of Syracuse was functionally land-locked. It made no sense to the captain/conductor of the American Wind Symphony, and it makes no sense to me. He spoke convincingly of the pleasure of traveling the inland waterways of this State and region. If he were here today, I know he would support S. 27.

Our projections show that the lakefront project will increase the tax base of the city by over 30 percent; create over 12,000 permanent jobs; and contribute over $12 million annually in new sales and property taxes. We are proud that, to date, this economic potential has been fostered by local public and private partnerships. But to really maximize Syracuse's resources to the point that they produce public benefits beyond our community—for the area, the Staten and the northeast region—we need Federal support. And I might add, Senator, for the country as well, and we're so thankful for the effort that you have made in the form of the Onondaga Restoration Act.

I certainly urge its passage today, and will in ensuing hearings. Meanwhile, let me say certainly, Senator Moynihan, that your legacy, when you choose, is to return and join the Common Council. Your national historic legacy will be greater than Onondaga Lake, but you have made a very exceptional commitment and a very exceptional effort on our behalf to see this beautiful promise become reality. To that end you have made an extraordinary number of personal visits here to this community, some of them without public notice. I want you to know that I am looking forward to the day when your peers in Washington—and, perhaps, interested people throughout the world—will be looking to this beautiful transformation, to this beautiful project. We will be looking for you personally to conduct tours of some of those luminaries in Washington and the world at large.

Thank you very much.

Senator MOYNIHAN. Thank you, Mr. Mayor.

We will now hear from Mr. Pirro, Onondaga County Executive.

STATEMENT OF NICHOLAS J. PIRRO, ONONDAGA COUNTY EXECUTIVE

Mr. PIRRO. Thank you very much, Senator. Before I begin my formal remarks I would like to make a couple of observations.

One, as I look around the room I see members of village, town, city, State, county, and Federal governments here, of all political persuasions. I see representatives of labor, management, and the business community. I see individuals—I see my friend Sage, though we disagree on other issues, but we are in common on this one. To see all these in this same room really means we are all on the right track because to bring together such a collection of different individuals with different responsibilities for one purpose is unheard of in my 25 years in government, as far as I am concerned.

The excitement is really here. This was shown yesterday by the conference put on by the Onondaga Lake Advisory Committee called Salmon 2000, and by the pamphlet of the Onondaga Lake Historical Association and Friends of Historic Onondaga Lake, ever increasing in size and articles, listing a number of activities that will take place around the lake this summer—Imagination, Celebration, the Waterfront Extravaganza, the Heids Concert on the Lawn, the Salt Boilers' Ball, remembering the trips on the Corrine for the dinner cruise on Onondaga Lake with my wife last summer, and dancing in one of the parking lots at Griffin Field. And now the real job of that final clean-up begins.

We all know that the evangelist Billy Graham is in town, and I guess I would have to say to you that your presence in town today makes you the environmental Billy Graham, and we appreciate it.

But I would like to thank you and Congressman Walsh for the opportunity to speak about the importance of this initiative, to assist this community in securing funding for the clean-up of Onondaga Lake.

From the time of the earliest settlements, Onondaga Lake has given us every treasure it possessed. It provided life-giving salt to the Native Americans and the early settlers; it provided the city of Syracuse and Onondaga County with a means to contain the ravages of cholera and typhoid, and it provided a sanitary disposal system which allowed for continuous growth over the last 150 years. It provided for the economic expansion of the area by giving a base to the industrial growth which took place throughout the latter part of the 19th century and through the first part of our present era.

Unfortunately, these demands have all but depleted the natural resources of the lake. It is time now for us to return to Onondaga Lake the vitality and beauty which it once possessed, to restore Onondaga Lake as a pleasing and ecologically sound symbol of our commitment to the environment of Onondaga County.

Onondaga County is committed to the restoration of Onondaga Lake. We have been for some time and will continue to introduce and support measures to end sewage effluent overflow to the lake. Since 1970, approximately $273 million of public monies from the Federal State, and county governments have been spent to expand and upgrade the Metropolitan Treatment Plant to eliminate malfunctioning treatment facilities, to provide sewer services for the towns within the lake watershed, to eliminate dry weather overflows, and to implement a best management practice program, which includes an active industrial waste water pretreatment system.

In cooperation with the Clean Water Act we are just beginning a $30 million project to replace the Ley Creek trunk sewer and increase the capability and capacity of the Ley Creek and Liverpool Pump Stations, thus eliminating wet weather raw sewage discharges from these areas. We are currently researching ways by which we may further reduce conventional pollutant discharge to the lake and expect to implement the results of this research in the next few years.

We will commit ourselves to over $800,000 this year alone for a cooperative venture with the State Environmental Conservation Department and Central New York Planning Agency for construction of a lake model which we hope will be the basis for much of the decision-making which will take place in the next few years of Onondaga Lake restoration. We have made arrangements through the State University system for a graphic information systems study of non-point pollution along Onondaga Creek.

Onondaga County has played a very active role in the efforts to revitalize and reclaim Onondaga Lake and we strongly support any legislation which will further the clean-up of Onondaga Lake.

In conjunction with the lake clean-up Onondaga County, which owns over 70 percent of the land adjacent to the lake, is also committed to create a perimeter of parkland around the entire lake. This park will encompass a variety of features and would provide a unique experience through the use of pedestrian walkways and bicycle trains which would be tied into special lake vantage points, historical and natural history tours and signage systems, tram rides, and athletic events, such as a mini-marathon.

Further, like all counties fortunate enough to be situated on or near water, we realize the vast potential and excitement in the creation of an urban waterfront. We know that such waterfronts can be dynamic and exciting areas within the urban environment. Waterfront shops and restaurants with dining areas offering spectacular views, tied into our shoreline park system, could provide an integral component of urban living experience.

Onondaga Lake offers us the opportunity to create a whole new dimension within this county. We want to participate in a cooperative and comprehensive plan for the redevelopment and improvement of the Onondaga Lake waterfront and shoreline. Such a plan would consider and incorporate wide-ranging interests and components under both economic and recreational banners, would include items such as tourism, new business, transportation, and cultural and historical attractions, and we would hope it would also assist in improving the distribution and sale of our agricultural commodities.

Onondaga Lake is a precious asset; perhaps a bit tarnished from decades of misuse, but a resource and a friend whose potential has not been fully realized. What we are doing now will not only clean up the lake and enrich the development of the shoreline for all our citizens, but when coupled with our future plans, will make this lake a major highlight of the region from which we will all benefit greatly, and will provide a national example.

If we are able to blend the will of this community with modern technology and the resources of the State and Federal Government, there is no doubt that we can restore Onondaga Lake. By doing so we demonstrate to the Congress and the people of this Nation that our national and environmental goals can be met. If we are able, and I know we are, we will return this lake to a healthy state. This will be a demonstration that there is no environmental problem in this Nation that we cannot plan and execute successfully.

Before I close, Senator Moynihan, I would like to urge you to consider the following recommendations as you and your colleagues continue debating S. 27.

First, Onondaga County hopes we can be as flexible as possible in the year-to-year funding. We have concerns that money unspent in one fiscal year would be lost. It is very likely that work on one year would be more or less costly than the maximum provided. We are committed to providing the necessary local resources, and we are confident you can understand our position in seeking some latitude in this regard.

Second, I applaud your wisdom in providing for a Management Conference to guide the lake restoration work. It is our position that the conference will function best with a legislated assurance of strong local representation and a requirement that the headquarters be located in Onondaga County. We also take the position that the Army Corps of Engineers unit responsible for overseeing the lake study be headquartered here as well. It is my hope these points can be specifically incorporated into the legislation, along with equally specific language outlining the scope of authority and responsibility of the Management Conference in coordinating this multiplicity of interests.

Third, I also ask your consideration that the legislation include language allowing for the creation of a special Lake Management District. It would provide a mechanism to set up a special benefit tax district and help generate funding for ongoing lake management and improvements.

Fourth, we believe it to be desirable and necessary that the legislation explicitly state that the primary focus of the project be to improve the Metropolitan Sewage Treatment Plant and correct the problems caused by combined sewer overflows. Failure to prioritize the expenditure to correct the current, primary sources of known discharges will adversely affect the primary goal.

Essentially, Senator, I believe that the more precise the statement of goals and responsibilities, the easier it will be for all concerned to focus on the goal and to work toward its attainment with cohesion and vigor. Your staff here and in Washington have been cordial and cooperative. I pledge to you the full cooperation of my staff to provide whatever assistance you need to expedite this effort.

Finally, I want to thank you once more on behalf of the entire community for your vision. Your ability to see the potential of Onondaga Lake as the centerpiece of the community's economic and recreational future is most commendable. I thank you now in the name of generations to come who will fish and swim in an Onondaga Lake as clean and as vital as when Father LeMoyne first came upon it.

Thank you.

Senator MOYNIHAN. We thank you.

Let me say—and I am sure Congressman Walsh would agree—that the convergence of views and commitment to the infrastructure is remarkable. It has been there for a century, and it is there now, so we can make some history here. It is not the worst thing to be the most polluted lake in the world; I believe the Russians probably have the world's record there. But when you've turned it around, you've made history. You show, as Mayor Young and Mr. Pirro said, that something can be done in that particular context, which is a "great city on a lake," as Mayor Young said.

We are a little landlocked. Now, in fact, we have a toxic waste site instead of a lake. When we clean that up you will be able to take a canoe, if you like, from that creekwalk or restaurant and paddle due west, or from Quebec or Sault Ste. Marie, when the wind is proper. We are part of a vast inland waterway.

I would like to thank Mayor Young for saying, "Let's show the Nation what we can do here."

This is part of our history. It is very much more of our history than you might imagine. New York State built the Erie Canal. We did it on our own. It wasn't our plan, but it worked out that way. We didn't hope that the Federal Government would be involved, or that the Corps of Engineers would be involved. At West Point the engineers have always been the elite of the class, and their first graduate came from Brooklyn. But the national government was opposed to internal improvements. Jefferson wanted to get that Tennessee-Tombigbee built, but they had the developments in Mexico and the French still controlled New Orleans, the outlet to the Ohio-Mississippi system. We did finally build the Tennessee-Tombigbee; it's a great one-horse, two-mule canal, and we built two sections late and it cost $4 billion. There aren't many mules left anymore, but it's very pretty.

But the Corps never got to central New York. It was just a year ago that the Chief of Engineers came here, looked around, went down to the lake, and flinched. I have to say that I saw a General of the Corps of Engineers flinch when he looked at the lake; he said, "Superfund."

But we put report language in last year's water bill asking them to consider that this is part of the inland waterway. This poisoned water flows into Lake Ontario, and it flows in to the Erie Canal. I believe it was you, Mr. Mayor, who mentioned that Lake Erie was once a dead lake, and so was the water tumbling off into the Erie system. Now that Lake Erie has been revived, a considerable achievement—it wasn't as much of a problem as Onondaga Lake is going to be, although a larger problem, of course; we had the Canadians as part of it—but once the Erie water was cleaned up, the canal water cleaned up. The canal is suddenly an extraordinary asset, as we are just beginning to remember.

One last point before I turn to my colleague. Upstate New York, central New York, should never forget its glorious endowment with water. Water is what most of the world is short of. We have an abundance and only need to restore it to its natural quality to be rich in ways that I'm afraid the rest of this Nation can only envy.

Sir?

Mr. Walsh. Thank you, Senator. I really don't have a great deal to add to what has been said.

I certainly commend County Executive Pirro. There are people of all political stripes here today, everyone united in this effort, and that's what it is going to take: total unity, people sublimating their own egos and political careers and agendas to solve a problem that we have lived with for much too long.

I commend you both for your comments, for your unanimity, and for the local support that is required.

Senator Moynihan. Thank you.

Mr. Young. Thank you, Senator, and Congressman Walsh. I look forward to that canoe trip, and I intend to have my staff do the pedalling.

Mr. Walsh. I'll bring my 10-horsepower with me.

Senator Moynihan. Before I call our next witness I would like to introduce the staffer from our office, Mr. Dan French of the Committee on Environment and Public Works; Dan Crane, behind me, from our office; and Tim Mulvey, who is a young attorney here in Syracuse.

Our second panel represents officials of the United States Government and the State of New York who have responsibility in this area. They are Mr. Langdon Marsh, Executive Deputy Commissioner of the New York State Department of Environmental Conservation; William Muszynski, Acting Director of Region II of the United

States Environmental Protection Agency—Region II, for reasons I have never fully understood, also includes Puerto Rico—and finally, Colonel Boyd, who is the Buffalo District Commander of the United States Corps of Engineers, who I imagine is the manager of about a quarter of the freshest water in the world.

Again, to follow our pattern, Mr. Marsh, you are first on the list.

STATEMENT OF LANGDON MARSH, EXECUTIVE DEPUTY COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Mr. **MARSH**. Thank you, Senator. It's a pleasure to be here and join you and the other officials, and you Congressman Walsh, in what I think is clearly becoming a celebration of an effort that we all want to undertake. I would note that I am here today on behalf of Commissioner Thomas Jorling, who couldn't be here today, and I know he wants me to bring both his greetings and those of Governor Cuomo who recognized in his State of the State address this year, I think in a unique way, the importance of this effort and of your leadership in undertaking a major restoration of Onondaga Lake.

Onondaga Lake is widely recognized by the citizens of central New York as an underutilized natural resource. The lake is often referred to as a symbol of past environmental abuse. It is both. I share your expectation that one day it will be neither.

The location of the lake, adjacent to the urban and industrialized portions of the Syracuse metropolitan area, resulted in its being the recipient of heavy loads of pollutants, particularly during the last 100 years. Other contributing factors are that the lake is relatively shallow and has a large watershed which contributes a wide variety of pollutants, including bacteria, toxic metals, nutrients, and silt. As a consequence, the lake does not meet the dual criteria of the Federal Clean Water Act of being "swimmable" and "fishable," despite the expenditure of several hundred million dollars of Federal, State, and local funds on water pollution control projects.

Have these projects been a failure? We think not. They have established a solid foundation for future pollution control efforts. These future efforts must go beyond the conventional treatment of sewage from the Syracuse metropolitan area. To meet the requirements established in the Clean Water Act, a comprehensive management program must be developed for the lake and its watershed.

The condition of the lake and the keen interest in long-term improvements in water quality and recreational use represent a unique opportunity. It is within the grasp of Government, in partnership with the private sector, to right past wrongs and again make the lake an environmental and recreational asset for the entire Syracuse area. We applaud the recognition of these facts which clearly underlies your legislative initiative.

Onondaga Lake merits special attention from all levels of Government and the private sector for its value as a national demonstration of what can be realized. Much has already been accomplished. Several developments over the past two decades, including the upgrading of the Syracuse Metropolitan Treatment Plant in

1979, implementation of industrial discharge reductions through Federal and State permit programs, and the closure of the Allied Chemical Solvay facility in 1986, have resulted in a measurable improvement in water quality and have helped to rekindle interest in the lake.

Over the past two years, monthly meetings of the Onondaga Lake Advisory Committee, appointed by DEC, have helped to generate increased public awareness of the potential of Onondaga Lake. An aggressive program of lake-related events developed by the Onondaga County Parks and Recreation Department and the announcement of a major redevelopment project for the "Oil City" area have helped to transform this renewed interest into a recognition that now is the time to hasten the pace of restoration efforts.

Much remains to be done if Onondaga Lake is to be restored to maximum recreational use. Under recent amendments to the Clean Water Act, each State is required to maintain a list of priority water problems and to use this list to apportion its water pollution control resources. Onondaga Lake has been and will continue to be the lake at the very top of New York State's list.

Senator MOYNIHAN. Would you say that once again? Onondaga Lake has been and will continue to be the lake at the top of New York State's list?

Mr. MARSH. That's correct, Senator.

Senator MOYNIHAN. That is very encouraging.

Mr. MARSH. Thank you.

We have initiated a number of activities to address specific aspects of the Onondaga Lake problem using our existing statutory authority. These activities include: seeking investigation and remediation of hazardous waste and other chemical contamination in the lake and from sources adjacent to the lake and in the watershed. We have instituted proceedings to begin to collect from responsible parties natural resources damages, as allowed under Superfund. With the county and the Atlantic States Legal Foundation we have completed a National Municipal Policy Settlement to upgrade the Metro facility and reduce the impact of all manner of discharges from the municipal area including, of course, combined sewer overflows. The scientific studies that Mr. Pirro mentioned, designed to better understand how the lake will respond to further clean-up measures, could not have occurred without strong cooperation and support from EPA.

We have recently drafted a preliminary statement entitled "The Onondaga Lake Strategy" which describes ongoing activities and which we hope will provide a framework for the actions which we believe should be undertaken over the next five to ten years to further improve and eventually restore the condition of the lake. I am providing a copy of this preliminary strategy as part of my written testimony and I would request that it be put in the record.

It is the beginning of a planning process, or the next step in a planning process which began a few years ago. It is still, however, in the formative stages. We need citizen, local government, and group input, and then we need to refine our general recommendations into more specific initiatives. The Federal assistance that is proposed in your legislation is both timely and very much needed in that connection.

I can't emphasize too strongly that when viewed collectively, the problems of Onondaga Lake constitute the most complex and difficult water quality management problems to be found anywhere in this country. Under the auspices of the Upstate Freshwater Institute, some of the most renowned environmental scientists in the country have formed a consortium in order to study the lake. If you ask these experts, they will tell you that Onondaga Lake is the largest, most accessible lake in the country which exhibits water quality problems of this nature and use impairment of such extreme intricacy and intensity. It is, unfortunately, unquestionably the most polluted large body of water in the United States.

There are important elements of a comprehensive restoration program for the lake that either cannot be done or would not be accomplished on a timely basis using only existing funding sources. Therefore, with the assistance provided by your initiative, a coordinated effort led by EPA and New York State can achieve the cleanup we all seek.

I would also like to note that the outflow of Onondaga Lake flows into Lake Ontario via the Oswego River. To the extent that the lake may act as a source of pollutants to that system, your initiative would also help in meeting our international water quality agreements and commitments for the Great Lakes. I think that's something to which both Canada and the United States have made a very important commitment.

In conclusion, I haven't mentioned the mechanics of how your legislation will be implemented, but we strongly endorse it in concept. I have spoken with your staff about a few refinements that we might like to see, but the initiative is very opportune and much appreciated by New York State. We look forward to working with you and your staff as you move it forward through the legislative process.

Thank you.

Senator MOYNIHAN. Thank you, sir. That was very good testimony.

Let me reciprocate on behalf of Mr. Walsh and myself and offer our greetings to Commissioner Jorling.

Now for the counterpart on the Federal Government side, from the Environmental Protection Agency, Mr. WIlliam J. Muszynski.

STATEMENT OF WILLIAM J. MUSZYNSKI, ACTING REGIONAL ADMINISTRATOR, REGION II, ENVIRONMENTAL PROTECTION AGENCY

Mr. MUSZYNSKI. Thank you, Senator.

Clearly, the lake is a valuable natural resource that has been significantly affected by both industrial, municipal, and non-point-source pollution.

As Lang Marsh indicated, the lake does not meet the "fishable/swimmable" goals of the Water Quality Act due to particularly high bacterial counts. There is a DEC fish advisory, due primarily to mercury contamination. An analysis of sediment and water column shows 56 hazardous waste chemicals that have been identified. Aluminum and mercury exceed Class B water quality standards for swimming. Mercury in excess of one part per million has been found in the sediment. The list goes on.

The lake currently appears on the State's inactive hazardous waste list, and the State is currently doing an analysis which——

Senator MOYNIHAN. Do you or Mr. Marsh want to tell us what you mean by "inactive" list? Is an inactive waste site in which there are no further deposits?

Mr. MARSH. That's correct, Senator. It's our State counterpart of Superfund, and we list those sites which are no longer being contributed to by ongoing industrial activity.

Senator MOYNIHAN. But they are a waste site, and so defined for purposes of the Superfund legislation which we passed in 1980?

Mr. MARSH. That is correct, although they are not on the national priority list. They are on the State list which compliments that.

Mr. MUSZYNSKI. There is also a phosphorus problem, despite a ban, which contributes to algae blooms in the summer months. So the lake, obviously, has been affected by pollution sources.

What's being done? Well, the Central New York Regional Planning and Development Board in 1986 began a preliminary lake and watershed plan. Part of the funding that came forward from that plan came from section 205(j) of the Clean Water Act, through the State.

The cost of the study that has been implemented to identify and develop modeling to help identify the solutions to the problems in the lake is about $1.4 million, of which about $600,000 has been or will be supplied under the 205(j) program. The intention is to characterize the lake's problems and develop modeling and management plans to correct those problems. It is anticipated that the modeling efforts would be done sometime in the summer of 1991, and the management plan itself could be developed by December of 1991.

So clearly, using a combination of Federal, State, and local resources, the planning is underway.

We have reviewed the proposed Onondaga Lake Restoration Act of 1989, introduced on January 25th, 1989. The bill calls for the establishment of a Management Conference that would oversee the development of a plan for the clean-up of the lake and provide funding at a level of $100 million for plan development and implementation. The Management Conference would include representatives of EPA, the Corps of Engineers, New York State, Onondaga County, the city of Syracuse, and a citizens' advisory committee, as well as a technical advisory committee. EPA would be charged with looking at the lake's environmental problems, and the Corps with implementation methods and costs.

This conference approach, as introduced, is similar in concept to an approach we have found particularly successful in implementation of the National Estuary Program. It also echoes the initiatives presently underway which I have just described.

The Management Conference approach to an Onondaga Lake study would provide for funds beyond those necessary for just planning activities, and is inconsistent with the phasing out of large-scale Federal grant programs for implementation of water pollution control strategies. Assistance for such projects as Onondaga Lake is being reduced under the Federal grant program. Consequently, Federal funding above the levels provided through the existing programs cannot be supported. However, New York State does have the discretion to use its remaining construction grant set-aside fundings for the program, and may also apply for the use of Clean Lake funds. In addition, the State may elect to use the State revolving loan fund in cleaning up the lake.

The responsibility for funding and managing any clean-up activities in Onondaga Lake lies with the State, localities, and local dischargers. As I mentioned earlier, the State has already begun the lake characterization, and is planning to develop the implementation plan. There is nothing to preclude the State of New York from convening its own Management Conference, and we certainly would be happy to assist them in that effort.

I thank the subcommittee for the opportunity to be here today and to share with you EPA's views on the lake. Thank you.

Senator MOYNIHAN. We thank you very much.

We will now continue with our panel. Colonel Boyd, we welcome you from Buffalo.

STATEMENT OF COLONEL HUGH F. BOYD III, BUFFALO DISTRICT ENGINEER, U.S. ARMY CORPS OF ENGINEERS

Colonel BOYD. Thank you, Mr. Chairman and Congressman Walsh. I am Colonel Hugh Boyd, the Buffalo District Engineer of the U.S. Army Corps of Engineers. I am pleased to be here this morning on behalf of the Secretary of the Army to discuss Onondaga Lake. The goal of my statement is to inform the subcommittee of the Corps' general planning, engineering, and environmental activities as they may relate to situations like those affecting Onondaga Lake.

As you know, the U.S. Army Corps of Engineers is the largest public engineering organization in the world. For more than 200 years the Corps has responded to changing national needs. We have extensive planning, engineering, and environmental experience in addressing water resources issues and in developing economically-justified, technically-sound, and environmentally-acceptable solutions. We also have unparalleled experience in contract administration, especially dealing with water-related studies and construction.

From what I have read and heard, one of the major problems associated with Onondaga Lake is its degraded water and sediment quality, which is adversely affecting recreational potential, fish and wildlife resources, and the potential for redevelopment and economic growth of the surrounding area. A cursory review of the available information indicates that the lake's poor water and sediment quality is the result of years of raw sewage and industrial discharges. Currently, a study of the water and sediment problems in the lake has been initiated by the Central New York Regional Planning Board. It is likely that any action undertaken for Onondaga Lake will have to consider permanent disposal of the polluted sediments. In fact, disposal of polluted sediments could very well be the major constraint to any comprehensive program for the Lake.

In addressing problems and solutions for Onondaga Lake, the State may wish to refer to the Corps of Engineers demonstration wastewater management program for Lake Erie, authorized by the Water Pollution Control Act of 1972. The Buffalo District managed this five-year, $5 million study. We assessed the eutrophication problem in Lake Erie and determined that non-point sources of phosphorus had to be controlled to restore the lake. Then we developed a strategy to control agricultural sources of pollution and carried out a demonstration program in three counties. This demonstration program was then expanded by the U.S. Environmental Protection Agency to 31 counties. This program has subsequently been adopted by the State of Ohio in its phosphorus reduction program for Lake Erie.

Also, under section 118 of the Water Quality Act of 1987, Congress directed EPA to carry out a five-year study and demonstration project to control and remove toxic pollutants in the Great Lakes. The EPA has entered into an interagency agreement with the Department of the Army to allow the Corps to assist EPA in development and implementation of this study. The Chief of my Water Quality Section in the Buffalo District is Chairman of the Engineering/Technology Work Group set up for this study.

Mr. Chairman, that concludes my statement. I will be happy to answer any questions that you may have.

Senator MOYNIHAN. We thank you very much. You're one of those West Point engineers yourself, aren't you?

Colonel BOYD. Yes, sir.

Senator MOYNIHAN. I have a couple of very clear questions, and I want to go in sequence, since each of you has said something very important. Also, each of you has brought up questions of how we got here.

In the first case you did, Mr. Marsh, Allied Chemical's predecessor, Solvay, began in 1884, and they dumped their poison into our lake for 102 years, and when there was no room for any more, they left. They left. They didn't leave a chair in forestry behind at the university, or they might better have dedicated a chapel at LeMoyne.

You know, that's an $11 billion corporation.

We have this information, and I am going to ask you this collectively; see if you can't work it out.

A 1985 report by the Post-Standard, which has been very good about this for half a century, estimated that somewhere between 20 and 40 percent of the volume of the lake has been displaced by sediment out of the Solvay process. It just built up the bottom. The lake itself flushes every 45 days, but it can't move that stuff down there on the bottom. I hope everybody heard the passage from Colonel Boyd's remarks, that "permanent disposal of the polluted sediments could very well be the major constraint to any comprehensive program for the lake." I just want to have you all hear me as you begin to think about how you can cease the flow in. And then we think about what we have to get out, and where we are going to take it. Does everybody follow that?

I hate to make it hard for Mr. Marsh; he knows the respect in which I hold him and his department, but in 1979 I got $15 million, which would be about $50 million currently, to dredge up the PCBs which had been dumped into the Hudson River at Fort Edwards by the General Electric Corporation. They weren't aware, perhaps, of how toxic this stuff is, but it's there in the lake, and the consequence is that you can't eat fish out of the Hudson. There are cities like Poughkeepsie, which drink that water. But in 10 years the department has not been able to dredge those PCBs because they can't find a hole to put them in.

I got rather frustrated last year and suggested a county which has plenty of room that might be willing to take these—it's the one county in 62 that I lost in 1957—but it has to be attended to. So you can organize and get the program going. The PCBs are leaching down and pretty soon they won't be in the concentration that they are now.

I have two questions; one is, how do we get us from the State's register of inactive waste sites to an active EPA designation? Let's see, you've got one over here at Lake Oneida. Could the two of you just talk informally among yourselves—and, Colonel, you can be moderator.

Mr. **Marsh**. I'll begin.

We have, as I mentioned, listed the sediments on our State Superfund list which gives us access to the State Superfund, which is a $1.2 billion bond act that was passed a few years ago. It also has similar authorities——

Senator **Moynihan**. That money is used to match Government money?

Mr. **Marsh**. Well, it can be used for that, but it can also be used to fund the entire clean-up. However, the law that we operate under requires us first to pursue the responsible parties—in this case Allied, LCP, and others that we may be able to find to do the clean-up.

As part of that study or program we are doing a study, an investigative phase study, which will not only help us figure out what to do, but will hopefully give us enough information to present to EPA, and—if it ranks high enough—it is possible to qualify for listing on the Federal National Priorities List. So there is a sequence which we will get to, probably later this year, once the investigative phase——

Senator **Moynihan**. Later this year?

Mr. **Marsh**. Later this year. We can then see if we can justify making a nomination to the National Priorities List.

Mr. **Muszynski**. As Lang said, we work cooperatively with the State on most of this—on all of the sites in New York State. When we get that data we will put it into the formula that creates a score under the Hazardous Ranking System, and then it will determine——

Senator **Moynihan**. Well, you have to do that, put numbers to a particular process. But we've got the most polluted lake in the United States of America. I would have thought it might make your list.

Mr. **Muszynski**. In order to make that list we have to get the data that the State is now pursuing.

Senator **Moynihan**. All right. But you say, Mr. Marsh, that by the end of the year you will have this data?

Mr. **Marsh**. Yes, sir.

Mr. **Walsh**. Mr. Marsh, a year or so ago a number of samples were taken of that sediment, and there's a story going around that those samples were lost. Is that in fact true? If it's not true, what was the result of that sampling?

Mr. **MARSH**. I didn't hear that story so I can't say whether it's true or not. I can't give you the results of the sampling here, but I'd certainly be happy to provide you with the results from our staff as soon as they are available.

Mr. **WALSH**. The results of that sampling are not available at this time?

Mr. **MARSH**. I think they very well might be. I don't have it at my fingertips.

Mr. **WALSH**. Would that not be critical to declaring the lake an environmental disaster, to get it on the Superfund list?

Mr. **MARSH**. Yes. That's the basis of the investigative study that we're doing. It's a whole series of samplings of the sediments and so forth, and that is being pulled together and more sampling done, and the report will be written later this year which we hope will justify a national priority listing.

Senator **MOYNIHAN**. You know, Superfund begins in Love Canal. We have Superfund sites all across the northern States. It hasn't proved to be a big exercise.

Keep us in touch. The committee would really want to know, particularly if there's a problem. And maybe you, sir, could help us.

Last spring, the General in charge of the Atlantic Region, and a number of his deputies, attended a ceremony out here on the canal—are you aware of that?

Colonel **BOYD**. Yes, sir. That was General Van Lobensels.

Senator **MOYNIHAN**. He announced that he had looked at what is now the terminal of the Barge Canal, which was so successful, and the first thing he said was, "Superfund." But there is a disposition to think that Superfund means dry and round, a disposition to say that sediment in lakes is different. I don't know that. Do you have some advice on that?

Mr. **MARSH**. I am sorry. Mr. Krichbaum, my Regional Director of DEC, reminded me that it was not that the samples were lost. It was that there were lab errors in analyzing them, and they have now all been retaken.

Mr. **WALSH**. Were those samples taken in the lakebed itself and the canal and the terminal, or just in the lake?

Mr. **MARSH**. In the lakebed.

Mr. **WALSH**. The reason I asked that is because I believe that the Army Corps came in and looked at the terminal area, and they were concerned about the sediments there.

Mr. **KRICHBAUM**. There are problems with the sediment in that particular area, yes, heavy; metals and so forth.

Mr. **WALSH**. In the terminal area?

Mr. **KRICHBAUM**. In the terminal area. The DOT has wanted to dredge it because they have trouble with some of their larger boats going in and out.

Mr. **WALSH**. They're not using that now because of the sediment? Isn't that also true?

Mr. **KRICHBAUM**. I believe they still get through, but they are kind of dredging it with their boats as they go through.

Last year we tried to work with the DOT on the dredging and told them they had to do some testing because we had to see what the heavy metals were, how high and so forth, just for where they dispose of the material.

Senator **Moynihan**. I'd like the record to show, for the Washingtonians, that we are talking about dangerous substances that are a thousand feet from Clinton Square.

Sir, you did hear the statement that this water is polluted and poisoned—it's beyond pollution; it's poisoned with mercury. It flows into the canal system and it flows into Lake Ontario and it reaches Canada. So the Corps of Engineers has a necessary concern. We have the Boundary Waters Commission, which would be involved with water between the U.S. and Canada. Do you have something to say about that?

Colonel **Boyd**. We do serve with the Canadians on the boards of the International Joint Commission where we look at water issues of the waters that we share, so we do share that concern.

Senator **Moynihan**. I know that the provinces of Quebec and Ontario are concerned about this. I don't want to scare people, but Allied Chemical dumped a quarter of a million pounds of mercury into that lake. It's down there, and it will kill you.

It was a first principle with Superfund that we would go out and clean up immediately where we found health hazards, but there were people who put it there who were ultimately responsible. When are we going to start bringing Allied Chemical into court? Or before our committee? I don't want to jeopardize anything that is now going on, but I'm not going to wait much longer. Exxon is going to put up a billion dollars to take care of that oil spill, which happened one time in one day. Allied Chemical poisoned our lake for one century, and then walked away.

Give Exxon credit. They said, "Yes, we did it, and we'll undo it." And, Allied Chemical——

Mr. **Marsh**. We have begun in two ways. One is that we have engaged Allied in a series of agreements and understandings about beginning the investigation, and then remediation, on the land-based sites, the waste beds and so forth, that contribute to the pollution of the lake. Under our Superfund, as would be the case under the Federal Superfund, we regard them as the responsible party and will seek to hold them responsible for the clean-up damages.

Senator **Moynihan**. How did they respond?

Mr. **Marsh**. By and large they have cooperated with us. There are some areas of disagreement that we have to pursue.

The second line of action began on March 20th when Commissioner Jorling referred to Attorney General Abrams the entire matter of the natural resource damage to Onondaga Lake under the clause of the Federal Superfund for natural resource damages, as well as under State causes of action for nuisance and so forth. We expect that the Attorney General will begin his investigation and legal proceedings to deal with Allied and the other responsible parties for the entire damage to the lake, because we believe that the first principle ought to be—as it is in the Federal Superfund—that the responsible parties ought to pay. They should pay for the clean-up of the sites which have contributed and which still contribute to the pollution through the wastebeds and soil contamination around the lake, and which still contribute to the problem of water quality. The responsible parties should also pay for the loss of the use of the environment by the people and the requirements for clean-up and restoration of the lake in the future. All of this, we believe, is encompassed in the concept of natural resource damage.

That's going to be long-term litigation, but we have begun the first steps toward it.

Senator MOYNIHAN. It will be long-term, but maybe we should have some hearings on it. I would like to have you talk to the Attorney General's office. We don't want to get into matters that might be before him, but neither do we want to avoid that, because here we have an $11 billion corporation; it has taken 30 years to get us here, and lawyers are cheaper than penalties. We've begun that.

Just for the record, I could give an example of contrary attitude—or ethos, if you like a big word. I held a hearing in Rochester a month ago. The Kodak Company and the Xerox Corporation, chemical companies, have some problems up there. They admit them. They didn't hide and they didn't send their lawyers to say that they were sorry, that they would look into it later; they came right forward and said, "This is what we think. This is what we're doing. If anybody has got a better idea, we would want to hear it, and we would be happy to do something." That's their style.

I don't recognize any signs of style here except, mind you, "We've got to get out of town." Lots of luck. Lock up the Chief Executive's office pending an agreement on damages.

Would you not agree that litigation is in order?

Mr. MUSZYNSKI. I agree wholeheartedly. Again, the State is taking that first action. What we've tried to do with States in similar projects and similar areas—maybe not as grave as some of the problems here—is that the State is taking a legal action, and we don't stick our nose in and muck it up for them.

Senator MOYNIHAN. But you agree wholeheartedly——

Mr. MUSZYNSKI. I agree wholeheartedly that where the polluters have the means to repay the damages, they should be held accountable.

Senator MOYNIHAN. But do you agree wholeheartedly that OMB should have turned you down in your request for support of S. 27?

You don't have to answer that.

Mr. MUSZYNSKI. Thank you.

Senator MOYNIHAN. It's the story of our life, OMB says "no." But theirs is not the final word; Congress does that.

Colonel, on my part, I thank you for your testimony.

Mr. WALSH. Just one last question I want to ask of Mr. Muszynski. Maybe Mr. Marsh would know the answer to this also.

Your statement was, "However, New York State has the discretion to use the remaining construction grant set-aside funding for the program, and may also apply for the use of clean lake funds."

Mr. MUSZYNSKI. Under the construction grants program there is a set-aside that is allowed for the Governor of the State of approximately 20 percent of their allocation. This year their allocation is approximately $208 million, so they could set aside a portion of that for combined sewer overflow-type corrections.

In addition, there is a 2 percent set-aside under 205(j). The State has been using some of those monies to fund the planning efforts that are currently ongoing.

Mr. **WALSH**. What is the total amount available to the State under 205(j)?

Mr. **MUSZYNSKI**. It's 2 percent of their allocation, so 2 percent of about $208 million.

Mr. **WALSH**. Of that same pot?

Mr. **MUSZYNSKI**. Of that same pot.

As we get into the next few fiscal years the Federal program is phasing out of the outright grant program into a loan program——

Mr. **WALSH**. We're aware of that.

Mr. **MUSZYNSKI** [continuing]. So as the State, in a sense, uses those loans and recollects them back, they can also use that for this purpose.

Mr. **WALSH**. That's separate from this $250 million?

Mr. **MUSZYNSKI**. It's a piece of it. What happens is that in the next year they will split the allocation from grants; some of the money that would normally go to grants will now go to the loan program. The State has to establish that State revolving loan program in order to be eligible for those funds.

Mr. **WALSH**. But right now the State has the ability to provide 22 percent of that on a discretionary basis as a grant as opposed to a loan?

Mr. **MUSZYNSKI**. Well, it's discretionary in that the 20 percent is allowed by the Government to be used combined sewer overflow-type projects.

Mr. **WALSH**. Mr. Marsh, do you know how much of that money is left to go?

Mr. **MARSH**. Under the construction grants program, the remaining amount that is not——

Mr. **WALSH**. Encumbered?

Mr. **MARSH** [continuing]. Well, it's not going to be shifted over into the State revolving fund. Once our State legislature, hopefully within the next few weeks—I would prefer hours—passes the State revolving fund legislation, we can apply to the Federal Government to get that fund started.

Under the priority list that I mentioned before, the present priority list, we have allocated all of those funds to the projects that ranked the highest in that system. When I mentioned earlier that Onondaga Lake was the highest lake on that list, it is and it was, and recently has led the funding of the Liverpool and Ley Creek projects.

The rest of that money, however, is allocated under the existing system to projects in New York City and elsewhere. So we would look to the State revolving fund as the principal means of funding future projects of CSOs and others as those come up to the top. As I mentioned earlier, projects that deal with this lake will be at the top of the list of lakes in the State for those funds.

So there isn't really a pot of money that isn't committed that's available to us to put in a bank somewhere and hold for the CSO projects as they come forward in the future.

Senator Moynihan. Just one last question.

Last year we were turned around in trying to make sure that revolving fund, when it does come along, would maximize what was available to the State—in ways, frankly, which I never fully understood. Can you give us some comment on that, please?

Mr. Marsh. Yes. I think your efforts at the end of the year to get a favorable tax ruling out of the Treasury were extremely helpful.

Senator Moynihan. We were battling the Treasury about when the money got deposited.

You are also losing $90,000 a day because you haven't set up the fund.

Mr. Marsh. We are well aware of that. That's why I hope that the legislature could somehow act in a matter of hours instead of months or weeks.

Senator Moynihan. If $90,000 was laying on the street corner you would walk across the street to pick it up, wouldn't you?

Mr. Marsh. Absolutely.

Senator Moynihan. Would you tell the representatives of the Onondaga area that that $90,000 would help?

Mr. Marsh. I would be glad to, Senator.

Senator Moynihan. Present our compliments, and say that we would appreciate very much their passing that bill.

Mr. Marsh. I certainly will.

Senator Moynihan. Thank you very much.

Colonel, thank you. We haven't had the pleasure of welcoming you formally to Buffalo. You're a long way from Texas, but I gather that water is your business.

Colonel Boyd. Sir, it is, indeed. My family and I are enjoying central and western New York very much.

Senator Moynihan. I'm glad to hear that. Thank you for coming. We very much appreciate your testimony. When you next talk to OMB, tell them we said hello.

Colonel Boyd. I sure will.

Senator Moynihan. You have no choice but to request a decision; after that, it's our job.

Thank you very much.

Mr. Marsh. Thank you, Senator.

Senator Moynihan. We will now hear from our third and final panel, consisting of Robert D. Hennigan, Chairperson for SUNY College of Environmental Science and Forestry and Chairman of the Onondaga Lake Advisory Committee; William Donlon, Chairman of Niagara Mohawk Power Corporation; Dr. Steve Effler, Upstate Freshwater Institute; and Sam Sage, President, Atlantic States Legal Foundation. Gentlemen, we welcome you to the hearing.

Mr. Hennigan, we will begin with you.

STATEMENT OF ROBERT D. HENNIGAN, CHAIRPERSON FOR SUNY COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY AND CHAIRMAN, ONONDAGA LAKE ADVISORY COMMITTEE

Mr. Hennigan. Thank you, Senator Moynihan. My name is Robert D. Hennigan; I am Chairman of Onondaga Lake Advisory Committee and I am appearing here today in that capacity.

The Onondaga Lake Advisory Committee was created by Governor Cuomo through the Commissioner of Environmental Conservation in response to local requests to create an agency to oversee the rehabilitation and restoration of Onondaga Lake. The committee is a broadly representative group with members from the business community, the environmental community, local residents, and local, city, county, and State governments. A committee roster is attached to my prepared statement. The mission of the committee is to advise and make recommendations to the State and local governments on programs and policies affecting the lake's quality and usage.

Over the last two and a half years in carrying out its mission, the OLAC has held monthly meetings; provided a mechanism for community input; served as a coordinating and communication device; carried out public education programs; acted as a forum for discussion of regulatory efforts, new developments, and long-range planning, and has taken public positions on proposals impacting on the lake and/or related land areas. The committee receives strong staff support from Region VII of the New York State Department of Environmental Conservation, and fiscal support from the State through the good offices of State Senator Tarky Lombardi.

On behalf of the OLAC I would like to express our appreciation to you, Senator Moynihan, for your leadership in developing and introducing S. 27, the Onondaga Lake Restoration Act. This surely marks a seminal event in the evolution of Onondaga Lake and the lakeside community. I would be remiss if I did not also acknowledge Governor Cuomo's support for Onondaga Lake restoration as expressed in his 1989 State of the State message.

Over the past two years there has been a veritable explosion of activity relating to the lake. This includes the following:

First, accelerated development activity.

Second, the sewage overflows at Liverpool and Ley Creek are in the process of being corrected.

Third, the fishing ban has been lifted.

Fourth, the lakeshore trail is under design for the remaining lakeshore, thereby bringing the entire shoreline into the park-trail system.

Fifth, the St. Marie restoration project is underway.

Sixth, the lakeshore summer extravaganza is attracting more and more visitors to enjoy lakeside activities. The Carousel Mall project was launched, coupled with redevelopment of the Franklin Park/Oil City area.

Seventh, the regional market redevelopment project is about to get underway.

Eighth, visitor days to the Onondaga Lake park continue to grow, now exceeding 600,000 per year.

Ninth, the Atlantic States Legal Foundation has brought suit, joined by DEC and the Attorney General, which has resulted in a court order directing the county to undertake certain studies and remedial action.

Tenth, DEC and Allied Signal are in a continuing process of developing remedial action plans and consent orders over wastebed input into the lake; tar bed remediation; mud boil input from the salt mining area; mercury residuals in lake sediments and the fishery; and total site evaluation.

Eleventh, the LCP Corporation was cited for mercury inputs into the lake and has temporarily suspended operations. LCP was also assessed a penalty of $625,000 for violations.

Twelfth, a number of development proposals are in the works, including a number of co-generation facilities on the Allied site, including reactivating the old Allied coal-fired power plant; a new steel mill; and commercial and recreational projects in the Oil City area and along the lakeshore area.

Thirteenth, the combined sewer overflow situation is under study.

Fourteenth, there is a resurgence of public interest and commitment for lake rehabilitation and restoration.

Fifteenth, the Onondaga Lake Advisory Committee was created and has carried out many educational and advisory activities.

Sixteenth, the MDA through the partnership of the city, county, Syracuse University, and the business communities has selected Onondaga Lake Restoration as a major project and goal.

Seventeenth, the MDA has received a grant of $100,000 from the State, the city, and the county to develop a land development plan for the land adjacent to the lake.

And eighteenth, the Attorney General has indicated that he is bringing actions against those responsible for past pollution.

Notwithstanding all this activity, there are a number of actions necessary for the reclamation and rehabilitation of Onondaga Lake.

We would present to you and to the Management Conference provided for in the bill the following tasks needed to evaluate lake needs and to implement an effective program:

Create a management agency to direct and oversee the program.

Evaluate alternatives to capture and treat combined sewer overflows on Ley Creek, Onondaga Creek, and Harbor Brook.

Institute remedial action to abate combined sewer overflows. This work must be closely coordinated with the redesign and redevelopment of Onondaga Creek.

Evaluate the effluent requirements and compliance of the Metropolitan Treatment Plant and for other point sources discharging to the lake and tributaries.

Complete the modeling studies and development of appropriate models for the areas of phosphorus, nitrogen, bacteria, dissolved oxygen, algal blooms, transparency, and the transport and impact of sediment generation.

Evaluate the cost and technical feasibility of providing for in-lake aeration to increase oxygen levels in the hypolimnion during periods of stratification.

In the groundwater area, conduct a hydrogeologic study of the tributary land areas from the St. Marie area around the southern end of the lake to the northern extremities of the Allied waste beds, including those areas between Route 370 and the lake on the east side, the area between Route 690 and the lake on the south and southwest sides, the Allied-Signal site, and the area between the lake and the waste beds. The purpose of this study is to determine the nature and extent of groundwater flow into the lake.

By way of remedial action for industrial residuals, prepare a remedial action and implementation plan for the Willis Avenue site of Allied-Signal; prepare a remedial action and implementation plan for the benzene lagoons of Allied-Signal; prepare a remedial action and implementation plan for the Allied-Signal waste beds; and prepare a remedial action and implementation plan for the mercury deposits in the lake due to Allied-Signal and LCP inputs.

Analyze the impact of the clay particles and sediment originating from the mud boils in Onondaga Creek Valley on Onondaga Creek and Onondaga Lake.

Design and implement remedial action to stop solids input from the mud boils into Onondaga Creek by constructing sedimentation tanks to capture the overflow from the mud boils and remove particulate matter by sedimentation with or without the use of coagulants, or by drilling wells around the periphery of the mud boil area to reduce artesian pressure creating the mud boils and diverting the natural flow or pumped flow from the wells to Onondaga Creek.

Determine the extent and nature of the sediment deposits in the lake from natural origins and from cultural activities.

Evaluate the feasibility of dredging lake sediment deposits from the littoral zone and from the deeper lake areas to improve aesthetics and recreational uses, create or improve fishery habitats, and/or to remove pollutants.

Carry out a comprehensive study of the feasibility of rehabilitation and redesign of Onondaga Creek with the following objectives:

One, maintaining minimum flows to support a viable fishery and to allow passage for Atlantic salmon in the spring and fall months;

Two, control high flows through off-stream storage retention basins within the city of Syracuse, as well as better use of the existing flood control dam south of the city;

Three, redesign the creek cross-section to reduce high flow velocities in order to minimize the existing hazard due to a narrow, deep channel with steep concrete walls, making it impossible to get out of the stream if they happen to fall in;

Four, reroute the creek to create a more aesthetically pleasing, more useful, and less dangerous urban waterway; and

Five, create an urban amenity with real recreational, aesthetic, and commercial benefits to the local community.

As to Ninemile Creek, determine the best method to rehabilitate the lower section from the mouth to the end of the Allied-Signal waste beds, and devise a remedial action plan to rehabilitate Ninemile Creek.

Determine the most effective way to improve Ley Creek and Harbor Brook for their best social and economic use.

Determine action necessary to establish a salmon run from Lake Ontario up the Oswego River, up the Seneca River, through Onondaga Lake, and up Onondaga Creek and/or Ninemile Creek.

Prepare an economic development plan on a short- and long-term basis. Such plan should incorporate parkland development around the lake, redevelopment of the Allied-Signal site, Oil City, Franklin Square, Regional Market, and any other lands impacting on the lake area.

Prepare an analysis and evaluation of non-point inputs and impacts on the lake and develop a plan to manage such inputs.

Prepare specific implementation plans and actions to carry out all needed work. These should include a financial plan which allocates cost between public and private sources and among the Federal, State, and local governments. Evaluate existing institutions to determine ability to carry out the program; if indicated, new institutions should be created to carry out the program. Develop a financial plan designed to guarantee completion of the needed work.

Assign each task to the appropriate Federal, State, and local agency.

Provide for financing of each of the tasks.

Senator Moynihan, this boils down into four main issues:

First, providing for a comprehensive management organization;

Second, funding and completion of needed plans and studies;

Third, financing and constructing remedial projects; and

Fourth, ensuring continued monitoring and management activities.

S. 27 provides the wherewithal to meet these basic goals. It provides for a Management Conference to oversee the entire program and to develop a management plan. In this regard we are concerned that the local community has a strong voice and that the Federal and State participants are sensitive to local concerns. It provides funding to finance needed studies and plans, and it provides funding to carry out remedial issues.

Funding studies, plans, and remedial measures calls for significant financial commitment by both State and local governments and others. This must be recognized by all concerned. It may well be that as the program proceeds, new needs and costs will be identified. It would only be fair in developing funding sources that the responsibility of those who have used the lake for waste disposal pay their fair share for studies and remediation efforts.

We think it is proper that the Corps of Engineers, as well as the Environmental Protection Agency, be involved in these efforts. The Corps has done an Oswego River Basin study, has recently done a special study relating to flooding on the Seneca River above the Baldwinsville Dam which will impact on the lake, and has designed and had constructed a flood control dam and related works on Onondaga Creek in about 1950. In other words, the Corps has been directly involved in activities relating to the lake for a number of years.

We especially urge that this bill be high on your agenda and that every effort be made to have it enacted and fully funded at the authorization level.

In closing, I again express the appreciation of the Onondaga Lake Advisory Committee for your efforts on behalf of restoration of Onondaga Lake, and pledge to you our total cooperation and support in advancing this bill and participating in its implementation.

Thank you.

Senator Moynihan. Thank you, Mr. Hennigan.

May I say that Mr. Pirro had some thoughts on S. 27 and Mr. Walsh's companion bill. If you have them, tell us. We just want to do what works.

Mr. Donlon?

STATEMENT OF WILLIAM J. DONLON, CHAIRMAN, NIAGARA MOHAWK POWER CORPORATION, REPRESENTING THE SYRACUSE PARTNERSHIP COMMITTEE

Mr. **Donlon**. Thank you, Senator Moynihan and Congressman Walsh.

I am William J. Donlon. You indicated earlier that I am Chairman and Chief Executive Officer of Niagara Mohawk Power Corporation. More importantly in regard to these proceedings this morning, I appear for the Syracuse Partnership Committee on Onondaga Lake.

Senator **Moynihan**. I am sorry. You were simply identified as being with Niagara Mohawk. I should have made it clear that you are appearing here representing the Syracuse Partnership Committee.

Mr. **Donlon**. That is correct.

Senator **Moynihan**. Fine. We welcome you in either capacity.

Mr. **Donlon**. The Syracuse Partnership consists of the Onondaga County Executive, the Mayor of the City of Syracuse, the Chancellor of Syracuse University, and the four top officers of the Metropolitan Development Association, representing the business leadership of the central New York community.

The purpose of the partnership is to identify and agree on key community projects and issues which will benefit from the concerted attention of this group. The business community has joined with the city and the county to bring together the total resources of both the public and private sectors in addressing these problems. It is a combination of the strength and determination of our community's public and private sector leadership.

Our organization has selected as its number one community issue, to once and for all address the correctable environmental conditions of our number one natural asset, Onondaga Lake. As an MDA director, I chair a committee of the Syracuse Partnership made up of major community leaders and representatives from the Onondaga Lake Advisory Committee. This Syracuse Partnership Committee has accepted the challenge of coordinating the restoration, conservation, and management of Onondaga Lake.

The mission and purpose of the Syracuse Partnership Committee is as follows:

First, to act as the community's coordinating body for securing and administering Federal funds authorized in the Onondaga Lake bill, S. 27, introduced by Senator Moynihan, and the companion bill introduced in the House of Representatives by Congressman James Walsh. This will include researching and developing the plan for Onondaga Lake restoration.

Second, the committee will recommend and take whatever action is necessary to secure required State and local matching funds, to be coupled with the considerable public and private investments already made, to match the Federal assistance provided for in the pending legislation.

The committee will cause the preparation of a community master plan for the lands totally surrounding Onondaga Lake. This utilization plan will be supported by the appropriate enabling and enforcing legislation and adopted as the community's master plan for Onondaga Lake and the areas that surround it.

I believe County Executive Pirro and Mayor Young have described to you the importance of the need for Federal participation to turn a tremendous community asset, that now has problems, into what can become an economic development stimulus for the entire central New York region. I would like to underscore a very important point. This community recognizes that without direct Federal assistance, we cannot adequately address the problems that plague Onondaga Lake, such as sewer overflow. But at the same time we clearly recognize that we cannot expect the Federal Government to be solely responsible for turning our plans to action. As I have indicated, we are prepared to put into place whatever State and local participation, both public and private, is needed to match the aggressive support you are coordinating on our behalf.

I believe one of the most important messages I could bring to you this morning is that the entire community is behind this effort. Organizations which at times have opposing views are joining hands on this Onondaga Lake project because the goals and objectives I have outlined to you are unanimously accepted by every interest group, public body, private enterprise, advisory committee, and not-for-profit corporation involved with Onondaga Lake.

We also clearly understand that the process for receiving Federal assistance will take considerable effort, but we trust that you will expedite the process. We are convinced that the aggressive program you have developed in order to gain the necessary assistance is the right way to go and the only way that we can turn years of environmental problems into an internationally-recognized community success story.

I do not want to repeat the excellent points raised by our governmental leaders, but I would like to emphasize their remarks on the importance of this project from an economic and environmental standpoint. This is the single most important project that will lead this community into the next century.

Environmentally, there is great regional significance to this project. The attraction of water is, in part, attributed to the fact that water is moving, traveling, going somewhere. It is this fact which makes our efforts at lake clean-up so important to the entire region. The water in Onondaga Lake flows north through the Three Rivers system, ultimately to Lake Ontario. Your commitment to support legislation leading to the expenditure of Federal funds for lake clean-up affects the entire central New York region and beyond.

Economically, this region has experienced a loss of over 8,000 manufacturing jobs within the last few years. The focal point of the entire central New York area is Onondaga Lake. Concepts will be developed for the utilization of lakeshore properties in an environmentally sound and responsible economic development plan.

The expenditure of public dollars for the restoration of Onondaga Lake will have substantial in-kind benefits which will impact all properties in proximity to the lake. The spin-off effect from the upgrading of these lands will be of major community-wide importance.

It is our responsibility to recognize the unique problems that require such massive attention. It is our goal and objective, with your help, to turn adversity to economic advantage. Without the infusion of millions in Federal funds, lake clean-up is not possible. There are not enough local resources to implement the necessary solutions to the major critical component—combined sewer overflow pollution abatement.

This is a project that is not at, but rather is, the front door of our community. The successful implementation of your efforts, coupled with equal recognition and assistance from the State and local levels, without a doubt will produce the spark of renaissance that this community and region so badly needs.

I again emphatically pledge to you the role my committee is willing to accept. We laud your efforts and extend our partnership to you as you assist us in charting the destiny of our community.

Thank you very much for the opportunity to appear before you today.

Senator MOYNIHAN. Mr. Donlon, I have not heard any more encouraging or extraordinary thing than your statement. I don't know if you were able to be here when we began this morning, but I recalled coming to Syracuse 30 years ago, and remarked that it is a community that expected very little of government, and consequently got very little; expected nothing of business, and got nothing; and had no relationship whatever with the university. And here you are, talking government and business and the university. That's such a change, and it is a wonderful catalyst.

I will continue with our panel, but I just wanted to say that. You are the missing link, ecologically or politically speaking.

Dr. Effler, you are our scientist here. We are very glad to have you and we welcome you here.

STATEMENT OF STEVE EFFLER, UPSTATE FRESHWATER INSTITUTE

Dr. EFFLER. I am presently a research engineer and scientist for, and a member of the board of directors of, the Upstate Freshwater Institute, Inc., a not-for-profit research corporation dedicated to freshwater research. I was born and raised in Syracuse. I've been involved in the study of Onondaga Lake since the mid-1970s. This effort has been funded since 1987. My investigations have been interdisciplinary in nature, including the biological, chemical, physical, and engineering aspects of the lake's problems. A listing of my professional contributions that have evolved from these efforts is appended to this testimony.

Since 1987 I have served as project manager and as a principal investigator of a multi-institution interdisciplinary effort to develop water quality models to guide remediation of certain of Onondaga Lake's problems.

I have prepared a table of the water quality problems as they exist in Onondaga Lake and tributaries. My intention in doing this is not only to update, but—

Senator MOYNIHAN. This Table 1 is the one you prepared?

Dr. EFFLER. That's right. If you have any interest in seeing it on a screen, I have it on a transparency.

Clearly, we have a highly polluted, impacted system. Water standard qualities are contravened every day. We have high concentrations of ammonia that are unacceptable for a healthy fishery. These prevail not just off and on, but routinely throughout the entire water column.

We have low transparency problems as a result of the high loading of phosphorus, high concentrations of phytoplankton, low concentrations of dissolved oxygen, and high concentrations of fecal coliforms.

The first four issues of Table 1 are now being covered. There are ongoing efforts to develop water quality models to guide management's efforts to remediate these problems.

The remainder of the list: mercury contamination, fish flesh, sediments, sediment releases, nutrients, toxics, high sedimentation rates, chlorobenzene contamination, ionic enrichment, etc., is presently not being addressed.

Senator MOYNIHAN. What is ionic enrichment?

Dr. EFFLER. In this case, chloride, calcium, and sodium.

Senator MOYNIHAN. In order to reverse the eutrophication process?

Dr. EFFLER. As a matter of fact, this particular problem is not related to eutrophication at all, but is a manifestation of releases from the Allied plant.

Senator MOYNIHAN. It's not an oxygen problem?

Dr. EFFLER. It's not an oxygen problem.

Also, near-shore sediments because of the industrial debris that lines our near-shore areas, and essentially you are going to have a very poor biological growth in the littoral zone. All the food chain interactions impact the lake releases and thereby the Seneca River. The interplay between the lake's quality and the River's quality will need to be addressed. The tributaries, as I mentioned, also have problems such as high concentrations of fecal bacteria. This is being actively investigated in Onondaga Creek.

Item two, high concentrations of suspended solids known as mud boils——

Senator MOYNIHAN. What is a mud boil?

Dr. EFFLER. It's an effusion of sediments based upon artesian activity, and it occurs in the upper parts of Onondaga Creek. It has greatly impacted the whole Onondaga Creek area. It makes it very difficult to proceed with Onondaga Lake without remediation of it; it impacts Onondaga Lake by releasing a lot of sediment into the lake.

There are high concentrations of phosphorus in Onondaga Creek, and also low transparency.

Senator MOYNIHAN. Let's see, now. If we're going to get salmon, they're coming here to spawn, and they will want to be spawning up that creek.

Dr. EFFLER. Either that creek or Ninemile Creek, which also has severe problems. The sediment on the bottom of Onondaga Creek is almost entirely inundated with this mud boil material, and the bottom two miles of Ninemile Creek, as one of my biological expert friends tells me, is essentially a biological desert; nothing lives there from the waste beds down to the lake.

Senator **Moynihan**. Say that again. Mr. Walsh knows so much more about this than I do. From the waste beds—which is the treatment plant?

Dr. **Effler**. No, that's the Allied Chemical waste beds.

Senator **Moynihan**. Oh, Allied Chemical?

Dr. **Effler**. Yes.

Senator **Moynihan**. Ninemile Creek goes through that?

Dr. **Effler**. Correct.

Senator **Moynihan**. And everything dies?

Dr. **Effler**. Well, I can't give you a positive response.

Senator **Moynihan**. Things live in the desert, but not many.

Dr. **Effler**. In this case, this desert has essentially no life. It has been caused by the inundation of the stream bed with industrial sludge.

Ninemile Creek has other problems because the leachate from the Allied waste beds continues down Ninemile Creek and then into Onondaga Lake.

What I tried to achieve by the table, you can see where the Xs are—these are efforts, which are very substantial, as a matter of fact, to address very major water problems for Onondaga Lake. This has a lot to do with restoring certain resource uses. However, I think it's very fair to say that we still have a large group of problems from a research and engineering point of view that are going to require some intensive efforts to establish simple cause-and-effect relationships and evaluate the extent to which remediation will be possible.

A word about how models fit into all of this. Models are designed to support management alternatives; in this case, to yield credible depictions of outcomes from changing the inputs of pollutants. In other words, how much of a pollutant do we have to eliminate to reach a water quality goal? Or, how good can the water quality of a lake be if we eliminate all the pollution inputs? It represents a credible way to make reasonable management alternatives as to how to best remediate the problems.

A word of caution that may be apparent in Table 1. A number of these problems have interactions. If we go after these problems piecemeal, without the development of an overall scientific/engineering framework for all the significant problems, it could result in a short-sighted decision on certain of these problems which could be obviated afterwards. So we need to be very careful here. We need the right technical information, models, good science, and good engineering in order to expect credible predictions.

As far as optimism goes for Onondaga Lake, I am in the business of collecting data and interpreting data, but I am not in a position to make some of the statements made here today by other gentlemen about what it means to this town, although I personally embrace those ideas. I can tell you that Onondaga Lake does show some positive response to the remediation efforts that have been put in place, signs of some positive changes that can be observed by a lay person. We think there is reason to believe that the kind of effort being proposed would result in remediation for the recovery, hopefully, of many if not all of the resources in Onondaga Lake.

Thank you.

Senator MOYNIHAN. Doctor, we thank you. In the end, this work will either be science-based or it won't succeed.

You have put a decade or more of your professional life into this subject, and it shows strongly. The list of publications—if we didn't have that, we would be kind of at odds.

Those salt beds really are a problem. I have a judgment here by a gentleman named Flock from the DEC. It says that a millon pounds of salty water is flowing into Onondaga Lake each day from the Allied waste beds via Ninemile Creek. He says that this is the equivalent of driving 25 truckloads of raw material to the edge of the lake every day and dumping it in.

You've got some consent agreement with Allied to start working on this, is that right? We are still dumping things into the lake?

Mr. EFFLER. At one point that flow of that same waste before they shut down was 5.5 parts per million.

Senator MOYNIHAN. Well, let's start putting a number on things. On any subject, you put a number on it and it looks bad, looks good, looks better, you define it. But 5 million was much too many; 1 million is too many obviously.

Thank you, Doctor. I'll get back to you for a general wrapup.

Mr. Sage, we welcome you, sir. I thought I'd give you a chance to open up on the subject of Allied Chemical.

STATEMENT OF SAMUEL H. SAGE, ATLANTIC STATES LEGAL FOUNDATION, INC.

Mr. SAGE. I am very pleased today to be able to testify before the Subcommittee on Water Resources, Transportation, and Infrastructure of the Senate Committee on Environment and Public Works on a subject dear to my heart, namely, putting in place a mechanism for restoring Onondaga Lake. The environmental community as a whole joins me today in thanking you, Senator Moynihan, for introducing S. 27 and for spearheading these efforts.

By way of introduction, I must digress from the immediate details of the proposed legislation to explain to the subcommittee that my concern and that of my family about the lake goes back to the end of the previous century when my grandfather left Syracuse because of the pollution of the lake and moved to the then-pristine Adirondacks. I only moved here in 1969, but have been involved with efforts regarding the lake since that time. I witnessed the lake when algal blooms and dead fish made being around the lake repulsive. I witnessed the lake when clouds of noxious gases befouled the air and made breathing difficult when walking along the shore. I witnessed the lake when dumping of materials, legal and illegal, was threatening its vital ecology. We have improved things considerably, but much more needs to be done if we are to regain this lake as a treasure for Syracuse and the Nation.

Many people continue to write off Onondaga Lake as a fouled waterway incapable of being restored with current technology and available resources. This is not my belief, nor is it the belief of those far-sighted individuals who recognize that a clean lake is not a luxury but a necessity for a healthy environment. A clean lake will be an economic boon not just in the narrow sense of allowing for further development, but as an attraction to central New York and a recreation resource for all of us. A clean lake will literally put Syracuse on the map as a success story without peer. It will be a morale booster, the worth of which will be incalculable.

Onondaga Lake must be cleaned up for yet an even more important reason. Onondaga Lake flows into the Oswego River and its waters then enter the lowest of the Great Lakes, Lake Ontario, through the Oswego Harbor. The Great Lakes, of course, are the world's largest repository of fresh water, and all steps must be taken to prevent their further degradation. Under the auspices of the International Joint Commission and the revised United States-Canada Water Quality Agreement, there is a commitment to remediate toxic hotspots in the lake system. There are 42 areas now designated as needing such special attention. One of these is the Oswego Harbor through which all the pollution in Onondaga Lake eventually flows. The Oswego Harbor Remedial Action Plan Committee, of which I am the co-chair, believes that clean-up of Onondaga Lake is necessary in order to clean up the Oswego Harbor. In much of Onondaga County, residents drink water from Lake Ontario; therefore it is important in preserving that supply that all pollutants entering Lake Ontario be eliminated. We feel that S. 27 will help that process along.

We support passage of S. 27, the Onondaga Lake Restoration Act of 1989, with certain changes and clarifications as enumerated in this testimony. Onondaga Lake is special and distinguishable from other such waterways of the United States and as such deserves special consideration by the Congress of the United States. Unfortunately, much of the special nature of this lake is negative. It is probably the most polluted lake in the Nation. This is said despite the efforts that have been undertaken with massive Federal funding, State and local assistance, and help from the scientific and environmental communities.

The past infusions of money have not solved the problems of the lake for various reasons related to intensive opposition from industrial dischargers, often misguided abatement policies and programs by the sanitary district, by lack of enough funds to do the job, and finally, by not having all the answers as to what needs to be done to restore the lake. I will discuss each of these in turn.

Much of the shoreline of the lake has been ringed with industrial development that mirrored the Syracuse area's place as a producer of basic chemicals and their derivatives. Activities related to water transportation as an important port on the inland canal system of New York also continue to cause problems. Many of these industries were among the most recalcitrant in America and required repeated enforcement actions to bring them into compliance with environmental laws. Atlantic States itself brought actions against three major polluters directly discharging into the lake. Often the power and influence of these industrial giants has led to less than the most aggressive regulation by the State to begin with, and so much of the discharges into the lake were deemed "legal." One industry was the subject of a major investigation by the Federal Government which led to a criminal conviction of the company and its top executives.

Hopefully, direct discharges are abating, and this form of pollution of the lake should become less of a factor. Indirect discharges of chemicals into the lake is another matter, as industrial pretreaters, runoffs from hazardous waste dumped decades before, and air deposition continue to plague the lake. Passage of air toxics legislation is needed to help with some of this, and more aggressive enforcement of State and Federal Superfund laws could help with other parts.

The situation with municipal water pollution control is not much better. Since my arrival in Syracuse in 1969 I have been actively involved with trying to get proper abatement of sewage from all county and city sources. Upon passage of the then-Federal Water Pollution Control Act we pushed hard for a complete environmental impact statement analyzing the then-proposed Metropolitan Sewage Treatment Plant. We felt at that time, and still feel, that the plant was the wrong design, built in the wrong place, and that it would not adequately handle the sanitary wastes in a manner that would lead to maximum benefits to the lake. Unfortunately we have been proven correct. Recently-concluded litigation by Atlantic States, joined by the State of New York, put the county on a road to possible—albeit expensive—solutions to these and more recent problems at the sewage treatment plant and other sewer discharges in the lake. Although there is now a consent order requiring certain studies, and although with Federal and State assistance certain pump station problems are being rectified, there is still no funding mechanism in place for the hundreds of millions of dollars full implementation of the consent order will require.

I have alluded to the funding problem in relation to sanitary wastes. This, however, ultimately strikes me as the easiest funding to obtain as much of this can and should be paid for by user fees for the facilities that must be constructed. Expansion of the treatment plant beyond what was envisioned originally should be borne by the new users and not by older neighborhoods or general tax revenues. Corrections for past mistakes should be paid for by individuals, if they were deliberate violations of sewer ordinances such as illegal hook-ups of storm drains. Finally, corrective actions to the system as a whole must be borne by the unfortunate taxpayer after full investigation as to why, in essence, double payment is needed to get the job done.

Finally, there are research needs for the lake. In the past much money has been spent on studies of the lake, and we have learned much of the limnology of the lake. Still more is needed. Our consent order with the county commits the county to making sure that additional modeling studies will be completed in a timely fashion. Unfortunately, with State budget strains, the share of these funds promised from that sector seem more in jeopardy, but there is a commitment from the New York State Department of Environmental Conservation to come up with these funds if at all possible.

Above and beyond this, other applied research on remediation is still needed. Problems of cleaning up the lake bottom have not been addressed. If we need to remove contaminated sediments we will have the unpleasant task of finding an hazardous waste disposal site to put them in. Bringing the Army Corps of Engineers into the picture would be most beneficial. The bill does involve the Corps; maybe this task could be made more specific.

There is one other miscellaneous matter that we wish to comment on. In 1977 Congress, in amending the Clean Water Act, added the Burdick Amendment which speaks to the issue of public versus private equity when public monies have been used in the clean-up of water pollution. We must guarantee that as public monies continue to be expended on Onondaga Lake that the public benefits directly. Restored lakeshore property that has been discarded in the past must remain for the general public good. We must keep the lakeshore public, maintaining and protecting natural and restored habitats used by resident and migrating wildlife. It would be unacceptable to spend public dollars and then turn the land over for private development, mostly for the benefit of the rich. This same issue is what led to the creation of Lowell Cultural Park in Massachusetts when the extremely polluted Merrimack River was restored. Something similar would be welcomed here in central New York and could be built as an extension of the Syracuse Urban Cultural Park.

In the interests of time I will dispense with a section-by-section analysis of the bill. There are, however, three main points that I feel need to be discussed, and changes then made in the proposed legislation.

First, the proposed membership on the Management Conference should be changed to explicitly have a member from the environmental community. Many not-for-profit organizations have worked tirelessly on lake issues and are largely the ones responsible for the attention that the lake is now getting. Without continued and institutionalized involvement and leadership from this sector we feel that the entire effort will not live up to its potential.

Secondly, we applaud the imaginative language that allows for a whole variety of entities to be eligible for funding under this legislation. We feel that the match required is proper. Our one concern is that what constitutes matching funds needs to include in-kind services and expertise if the not-for-profit sector is going to be able to effectively apply for any such funding. A level playing field would require this. Even the Technical Assistance Grants provisions of SARA are more liberal than what is implied here. Citizens can often donate time and expertise that governments and private consultants must purchase at great cost. These contributions should be allowed to constitute a match, as they are with the TAGs.

Thirdly, we would hope that language would be more specific in detailing what new monies from this bill would not be eligible for and that it be made clear to local and State governments that they cannot wait for Federal dollars to do necessary and required work under any other Federal statute. User fees from individuals and industries using the sewage treatment facilities and clean-up costs from responsible parties should be the first and most important source of monies. The additional Federal funds should be for new initiatives involving technology using state-of-the-art clean-up programs to work on toxic chemical removal that otherwise cannot be assigned to anyone. For instance, pilot projects on lake bottom restoration would be appropriate.

The last Congress passed legislation that became law on overriding the President's veto that reauthorized the Clean Water Act. This measure added various provisions protective of the Great Lakes. One of these was authorizing five demonstration projects for the clean-up of contaminated sediments in specified locations in the basin. Unfortunately, appropriations under this provision have not enabled the program to get going. We are concerned that a similar fate might happen to Onondaga Lake whereby good law goes begging for funds and comes out shorthanded.

Federal Superfund monies have largely been unavailable for aquatic sites such as Onondaga Lake. Even if the lake were to be listed, and we would urge that action be taken, under current EPA policy the ranking would be low and so no cleanup would probably take place. As a result of this many environmental groups have urged Congress to enact the so-called "Aquafund" specifically for such sites. If Aquafund were to be passed there could be a series of immediately-listed sites that could serve as demonstration sites where Congress could call for immediate research and clean-up. The current Great Lakes demonstration sites could be included, plus a few others, including Onondaga Lake.

We cannot emphasize enough our concerns that any monies appropriated by Congress be used constructively, efficiently, and only when other funding is not available. In addition we have grave concerns that this Federal funding not be looked at as a means of abrogating local and State responsibilities to do what needs to be done under State and Federal laws to get on with the further clean-up of the lake. Onondaga County has signed a consent order, a copy of which is attached as Exhibit A to my testimony, and is now under Federal court order to proceed with many clean-up activities. These will be costly. The Federal funds should not be viewed as a pot of gold that is under the proverbial rainbow, and although not obtainable, can be used as an excuse for inaction by those who have the legal responsibility to clean up.

In conclusion we applaud your efforts, Senator Moynihan, in bringing to the attention of the Nation the problems and needs of restoring Onondaga Lake. We hope to work with the Congress and with others with like interests in seeing to it that Onondaga Lake will once again be a well-appreciated asset for Syracuse and all of New York and the Nation. Thank you.

Senator Moynihan. We thank you, Mr. Sage.

I would just make a general point concerning my colleague, who is the other half of this enterprise.

Yesterday we had a lovely ceremony down in New York City where we signed the agreements between Quebec Hydro and the State Power Authority to bring in the first big infusion of Canadian power down here. I had done some work about the bond financing for part of it. The Chairman of the Power Authority, Mr. Flynn, made a remark, "Philosophers are frequently asked, 'Why is it that rivers are always near cities?' "

Or, as the Tin Man said, "Why is the ocean near the shore?"

But the fact is that it is a most exotic aspect of American urban setting, that with very few exceptions—Washington, D.C. is the only one that comes immediately to mind because there was never any industry—you had a cycle whereby settlements were made just simply because the water was a transportation route, and we could get from place to place. Then in the 19th century industry grew up and started using the water as a means of discharging wastes. And then you had improvements. In the 1890s here in Syracuse we built sewers, which were an improvement on outhouses; do not have any doubt about that, just as the automobile was an improvement on the horse.

But little by little the waters became polluted, and then the industry itself began to decline. Then the highway programs came along and put up these Chinese walls between the declining industrial sector and the water, and the rest of the city. My first involvement with this city was the Waylock House, which is immediately behind us, the last structure left of the Erie Canal. The Department of Transportation was determined to knock it down and put a highway through there, because the State owned the land. You know, why not? There were some citizens in Syracuse who said, "Don't do that," and in the end we didn't. But we did put up that wall. In the interval, the industry behind the wall died, and pretty soon the memory that there was anything behind the wall died.

And that's true in every major city in America. It's true in New York City and it's true in Rochester. The Falls of the Genesee are right there in the middle of the city of Rochester. If there are a thousand people in Rochester who know that, I would be surprised, because it is all surrounded by great big brick factories that use the water power, and in Buffalo; it will take 20 years to get that Bethlehem Steel plant down, but it's coming down. Everywhere it has been done, people are delighted at it.

In San Antonio they got the San Antonio River back. They put up a few walks alongside it, a few Tex-Mex restaurants, some movie houses, and they love it.

And we will love this. We should see it as showing what a real industrial city can do. This was the rule of the United States, the area between Albany and Buffalo: you can't go five miles without seeing a place where a "first" something began—the first tin can, the first Pullman car, the first automatic harvester, etc. So naturally we have the aftermath. If we are the first ones, really, to show how it could be done, we make it twice. It is not given to people to make history twice; but that is given to us.

I want to thank our panel. I want to thank the Syracuse Partnership. If you need a plaque or anything, we will get you a plaque. My colleague, Mr. Walsh, was saying to me that Mr. Hennigan and Dr. Effler are the real repositories of the "walking around knowledge" on this subject, and the public never says its thanks very well to people like Bob Hennigan. I want to say it on behalf of this committee.

Thank you, Mr. Sage, for your work.

Dr. Effler, you're a scientist, and you're doing science in a very important way, applied as well as theoretical. I know that's something that needn't be your only reward, but I want to acknowledge that it is marvelous that we have the science base that you and your colleagues have developed.

Mr. Walsh?

Mr. **Walsh**. Thank you, sir. You run a very tight ship, Senator.

I would just like to thank the witnesses who testified prior to this group, and this group in particular.

Mr. Hennigan, I would have to say that in my mind, you are without a doubt the progressive guru of Onondaga Lake. You have been talking up its merits for as long as I can remember. I can remember your early pronouncements about bass populations in the lake. The lake does support a bass population. Without your leadership and progressive thought and perhaps some dreaming we would never have saved this lake, but I am convinced that we can. I am convinced that the salmon will squirm up as far as the first impassable barrier in the Oswego River now, and when the lake is clean, they'll swim all the way to Onondaga Lake. I'm convinced of it.

Dr. Effler, having seen you sitting on that lake just before or just after the ice breaks, you certainly put in your time developing the data base that we can use to clean up the lake.

Sam Sage and Bill Donlon are sitting together; they bring the absolute ends of the pole together. Their efforts heal a scar on our earth in our very back yard. I am delighted, I am glad to be a part of it. I am very optimistic, always have been and always will be, but it's going to take more than that to heal that scar.

Senator MOYNIHAN. If anyone has worked in Nepal, if you can be optimistic about Nepal you can certainly be optimistic about this wonderful country and State here.

I see a gentleman asking to be heard. Is it something urgent we should do, or would something informal be possible?

Mr. SCHWARZER. Whatever you suggest, Senator. This is a field hearing and I wish to present some views.

My family has been here since the 1850s, and I thought you might——

Senator MOYNIHAN. We will hear you. We have the chamber until noon. I don't know if my colleague can stay, because he has to go.

I thank our panel and I thank our audience.

If the gentleman would come forward and give us his name and particulars, we will be happy to hear you.

STATEMENT OF FRANKLIN J. SCHWARZER, ESQUIRE, LAW FIRM OF SMITH, SOVIK, KENDRICK, SCHWARZER & SUGNET, P.C., SYRACUSE, NY

Mr. SCHWARZER. Good morning, Senator. My name is Franklin J. Schwarzer.

May I thank you for the opportunity to address this field hearing of the Senate for the restoration of Onondaga Lake. I am a member of the firm of Smith, Sovik, Kendrick, Schwarzer & Sugnet, P.C., and I represent various clients that are concerned with this restoration, and are heartily in favor of it, with a caveat.

I wrote to you and Mr. Azinski in January or February of this year concerning 70 violations of the New York State Pure Waters Act in connection with the proposal for the Syracuse Carousel Shopping Center.

My grandparents came here in 1850. My grandfather was a physician, surgeon, and chemist. He was one of the few men that——

Senator MOYNIHAN. Part of the post-1848 migration?

Mr. SCHWARZER. Yes, that is correct.

He was one who was opposed to the establishment of what you have called a rapacious corporation, and otherwise referred to as "those sons of bitches," Allied Chemicals. He fought against their establishment here because there was duck hunting, there was snipe hunting; Onondaga Lake whitefish were world famous; there was a yacht club, and it was a lovely little lake. Long Branch Park was there, and I remember swimming in the salt water pools established by the municipality in the late 1920s and early 1930s. So Onondaga Lake was at one time, really, a garden spot. There was a pool alongside the lake with diving boards, and you could float; whether you swam or not, you could be in that water.

The site selected for this Carousel Mall is a wetlands site, and they are proposing to put about 150 concrete piles there and float a concrete bed on top of it. And on top of that they will put their buildings.

This is similar to taking a sponge filled with ink, putting it in a basin of water so that the ink remains in the sponge, and then putting a flatiron on top of that sponge and having it push the ink throughout the water. If we go to Lake Erie on the west, in the Great Lakes, or if we go up to the St. Lawrence on the north, or if we go to the Albany section and the Hudson River on the east, this can put us in a situation that would be comparable to Love Canal. If there are pollutants contained in this site, that will squeeze them out.

I have written concerning the 70 violations of the Pure Waters Act. There are other people who have stated that there are transformers full of PCBs buried there, and nothing has been done to investigate it to this point.

My clients are worried because they think that there has been zoning, fire approval and building approval granted within a very short space of time to this mall. If this mall does not contaminate the property, and if the wetlands which act as a sponge can be relieved, or will not permeate the entire water table, we have no objections whatsoever. We think it would be a marvelous thing for Syracuse. But if this would cause the permeations throughout the entire water chain of pollutants that can indeed affect the entire State in a way that Love Canal affected the small area it was located in, we would urge great caution in this respect.

We would request that investigation be made of their own reports. You questioned a gentleman here concerning the reports of DEC. As I understand it, those reports are still not available for public consumption. As I understand it, the DEC reports of the Marley site are not available, and obtaining them has been prohibited by a court order.

I would strongly recommend that this investigation take place prior to any spending of the type of money that you have been able to obtain from Congress for this location.

We are deeply grateful to you. We are deeply indebted to you, and I do not feel that you should be set up without the complete facts available to you. It is my intent here today not to put any obstacles in this course, but to make clear to you what some of the problems could be, what some of the projected plans could do to increase and augment those problems if they are not completely investigated prior to their taking place.

I thank you, sir.

Senator MOYNIHAN. That's a very coherent statement, Mr. Schwarzer.

Mr. SCHWARZER. I have written to the State's Senators and Congressmen, and everyone seems to disclaim it.

Senator MOYNIHAN. I am not sure what I can do here specifically. There are reports in Albany that have not been made public.

Mr. SCHWARZER. Yes, sir.

Senator MOYNIHAN. Is this Pyramid?

Mr. SCHWARZER. That is correct.

Senator MOYNIHAN. I know what I am going to do now. I am going to have you meet with my young assistant, Mr. Mulvey, who is in charge of this area, and we will find out how you go about thinking about this type of subject. I recognize the point, and I know with the review processes it is exactly the kind of thing to avoid. We have engaged Mr. Mulvey to be right here in Syracuse in his law office, available for this sort of thing.

Mr. SCHWARZER. Most considerate.

Senator MOYNIHAN. Mr. Mulvey, who is an able attorney, said it would be normal for you, since you appear on behalf of various clients, to advise us who they are.

Mr. SCHWARZER. Senator, they have instructed me that they do not wish to be disclosed because they have to appear before the State bureaus in order to get zoning changes, building permits, etc., and frankly, they are concerned regarding that.

Senator MOYNIHAN. You understand this is not a legal proceeding?

Mr. SCHWARZER. I understand.

Senator MOYNIHAN. We would like to have it on the record, but it's up to you.

I don't see any further requests to be heard, and at the hour of 12:00 noon—by this somewhat faulty clock—we declare this hearing closed.

[Whereupon, at 12:10 p.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

[Statements submitted for the record and the bill, S. 27, follow:]

STATEMENT OF LANGDON MARSH

EXECUTIVE DEPUTY COMMISSIONER

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

BEFORE THE U.S. SENATE COMMITTEE

ON ENVIRONMENT AND PUBLIC WORKS

ON S.27 - THE ONONDAGA LAKE RESTORATION ACT OF 1989

APRIL 27, 1989

Good morning, Senator. My name is Langdon Marsh and I am Executive Deputy Commissioner of the New York State Department of Environmental Conservation. I am pleased to appear before you today on behalf of Commissioner Thomas Jorling.

Onondaga Lake is widely recognized by the citizens of Central New York as an underutilized natural resource. The Lake is often referred to as a symbol of past environmental abuses. It is both. I share your expectation that one day it will be neither.

The location of the Lake, adjacent to the urban and industrialized portions of the Syracuse metropolitan area resulted in its being the recipient of heavy loads of pollutants, particularly during the last hundred years. Other contributing factors are that the Lake is relatively shallow and has a large watershed which contributes a wide variety of pollutants, including bacteria, toxic metals, nutrients and silt. As a consequence, the Lake does not meet the dual criteria of the Federal Clean Water Act of being "swimmable" and "fishable", despite the expenditure of several hundred million dollars of Federal, State and local funds on water pollution control projects.

Have these projects been a failure? We think not. They have established a solid foundation for future pollution control efforts. These future efforts must go beyond the conventional treatment of sewage from the Syracuse metropolitan area. To meet the requirements established in the Clean Water Act, a comprehensive management program must be developed for the Lake and its watershed. The condition of the Lake and the keen interest in long term improvements in water quality and recreational use represent a unique opportunity. It is within the grasp of government, in partnership with the private sector to right past wrongs and again make the Lake an environmental and recreational asset for the entire Syracuse area. We applaud the recognition of these facts which clearly underlies your legislative initiative.

Onondaga Lake clearly merits special attention from all levels of government and the private sector for its value as a national demonstration of what can be realized. Much has already been accomplished. Several developments over the past two decades, including the upgrading of the Syracuse Metropolitan Treatment Plant in 1979, implementation of industrial discharge reductions through Federal and State permit programs and the closure of Allied Chemical in 1986, have resulted in a measurable improvement in water quality and have helped to rekindle interest in the Lake. Over the past two years, monthly meetings of the Onondaga Lake Advisory Committee, appointed by DEC, have helped to generate increased public awareness of the potential of Onondaga Lake. An aggressive program of Lake-related events developed by the Onondaga County Parks and Recreation Department and the announcement of a major redevelopment project for the "Oil City" area have helped to transform this renewed interest into a recognition that now is the time to hasten the pace of restoration efforts.

Much remains to be done if Onondaga Lake is to be restored for maximum recreational use. Under recent amendments to the Clean Water Act, each State is required to maintain a list of priority water problems and to use this list to apportion its water pollution control resources. Onondaga Lake has been and will continue to be the lake at the top of New York State's list. We have initiated a number of activities to address specific aspects of the Onondaga Lake problem using our existing statutory authority. These activities include: seeking investigation and remediation of hazardous waste and other chemical contamination in the Lake and from sources adjacent to the Lake, including recovery from responsible parties for natural resources damages; execution of a National Municipal Policy settlement to upgrade the Metro facility and its associated sewage facilities, including combined sewer overflow abatement; and participating in over a million dollars of scientific studies to better understand how the Lake will respond to further clean-up measures. Much of this funding could not have been obtained without the strong support of and cooperation from EPA.

We have recently drafted a preliminary document entitled "The Onondaga Lake Strategy" which describes ongoing activities and provides a framework for the actions which we believe should be undertaken over the next five years to further improve the condition of the Lake. I am providing a copy of this preliminary strategy as part of my written testimony.

Although we have initiated this planning process, it is still in the formative stages. Citizen, local government, and interest group input are necessary, after which we must concentrate on refining our general recommendations into specific initiatives. There is no question that the Federal assistance proposed in your legislation is both timely and very much needed. I cannot emphasize too strongly that when viewed collectively, the problems of Onondaga Lake constitute the most complex and difficult water quality management problems to be found anywhere in this country. Under the auspices of the Upstate Freshwater Institute, several of the most renowned environmental scientists in the country have formed a consortium in order to study Onondaga Lake. If you ask these experts, they will tell you that Onondaga Lake is the largest, most accessible lake in the country which also exhibits water quality problems and use impairment of extreme intricacy and intensity. It is unquestionably the most polluted large waterbody in the United States. There are important elements of a comprehensive restoration program for the Lake that either cannot be done or would not be accomplished on a timely basis using only existing funding sources. With the assistance provided through your initiative, a coordinated effort led by EPA and New York State can achieve the cleanup we all seek.

Before concluding, I would also like to note that the outflow of Onondaga Lake flows into Lake Ontario via the Oswego River. To the extent that Onondaga Lake may act as a source of pollutants to that system, your initiative would also assist in meeting our international water quality commitments for the Great Lakes.

In conclusion, although we have not dwelled on the mechanics of how your legislation will be implemented, we strongly endorse it in concept. The initiative is opportune and very much appreciated. We look forward to working with you and your staff as needed as you refine the initiative and advance it through the Congress.

TESTIMONY OF
WILLIAM J. MUSZYNSKI
ACTING REGIONAL ADMINISTRATOR, REGION II
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION & INFRASTRUCTURE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

SYRACUSE, NEW YORK
April 27, 1989

Good Morning. I am William J. Muszynski, Acting Regional Administrator of the U.S. Environmental Protection Agency, Region II. Our region includes the States of New York and New Jersey, Puerto Rico and the U.S. Virgin Islands. I am pleased to be here today and I thank the Subcommittee for the opportunity to discuss EPA's perspective on the proposed Onondaga Lake Restoration Act of 1989.

Onondaga Lake is 4.5 square miles in size and drains into the Seneca River, a tributary of the Oswego River, and ultimately empties into Lake Ontario.

Land use around the lake exhibits striking contrasts. Beautiful state and county parks encircle the northern and northeastern sections of the lake. Industry is concentrated in the southern and southwestern portion, including the extensive Allied Chemical waste beds.

The lake does not meet the fishable/swimmable goal mandated by the Water Quality Act of 1987 (the Act). Swimming is not permitted in the lake due to high bacterial concentrations. The New York State Department of Environmental Conservation (DEC) has issued an advisory against the consumption of fish caught in the lake because of mercury contamination.

Mercury contamination is the result of past disposal methods from the production of chlorine, dating to 1946. Onondaga Lake is on the New York State DEC Register of Inactive Waste Sites. In 1986 water and sediment samples were taken by DEC and analyzed for mercury. In 1987 water and sediment samples were taken by DEC and analyzed for Hazardous Substance List organic compounds (volatiles, semivolatiles, pesticides and PCBs), metals and cyanide. Fifty six organic HSL compounds were detected in sediment samples. Concentrations of aluminum and mercury in the water were found to exceed Class B water standards (Bathing). High concentrations of mercury were found to be widely distributed in the top six inches of lake sediments. It is estimated that 7 million cubic yards of lake sediment contain mercury concentrations greater than 1.00ppm.

DEC is completing an investigation of sediment contamination to determine if the site should be assigned a Hazard Ranking System Score for inclusion on the National Priority List.

The lake, which is not a drinking water supply, is highly eutrophic. Excessive phosphorus levels and resultant phytoplankton blooms persist despite a ban on phosphorus detergent, which has been in place for several years.

Since the late nineteenth century, Onondaga Lake has been impacted by various sources of pollutants. Some of the major sources of pollution to the lake have been: the Solvay soda ash plant; the Allied Chemical coal tar extraction facility; the Oil City tank farms; the Syracuse Metro Sewage Treatment Plant; and numerous combined sewer overflows. Despite the 1986 shut-down of Allied Chemical, leachate from its Solvay process waste beds continues to have an impact on the lake.

In 1986, the Central New York Regional Planning and Development Board developed a preliminary lake and watershed plan for Onondaga Lake. This plan was partially funded by EPA under Section 205(j) of the Act.

EPA has since provided additional funds to support a cooperative federal/state/local effort to develop water quality models necessary to characterize the lake's problems and develop management plans to achieve them. The total cost of this study is $1.44 million, of which EPA is providing almost $590,000 which includes proposed FY-1990 Section 205(j) funding.

The goal of the ongoing work is to develop a consensus among existing institutions on management alternatives to be implemented for restoring the lake. This management plan is to be completed by December 1991.

The plan is composed of two elements - the Scientific Investigation Element and the Management Element. The Scientific Investigation Element includes monitoring and the development of mathematical models relating pollutant inputs to water quality impact in Onondaga Lake. The models will be used to test pollutant reduction options and will provide a technically sound basis for resolving each of the lake's water quality problems. All the modelling efforts should be completed by August 1991. The Management Element will identify the implementation alternatives necessary for the restoration of the lake, scheduled to be completed in December 1991.

We have reviewed the proposed Onondaga Lake Restoration Act of 1989, introduced on January 25, 1989. The bill calls for the establishment of a Management Conference that would oversee the development of a plan for the clean-up of the lake and provide funding at a level of $100 million for plan development and implementation. The Management Conference would include representatives of the EPA, the Army Corps of Engineers (COE), New York State, Onondaga County, the City of Syracuse, a citizens advisory committee and a technical advisory committee. EPA would be charged with looking at the lake's environmental problems and the COE with the implementation methods and costs.

The conference approach, as introduced, is similar in concept to an approach we have found particularly useful in the implementation of the National Estuary Program. It also echoes the initiatives presently underway which I have just described.

The Management Conference approach to an Onondaga Lake study would provide for funds beyond those necessary for planning activities and is inconsistent with the phasing out of large-scale federal grants for implementation of water pollution control strategies. Assistance for projects such as Lake Onondaga is being reduced under the Federal grant program. Consequently, Federal funding above the levels provided through the existing grant programs cannot be supported in the bill, S. 27. However, New York State has the discretion to use remaining construction grant set-aside funding for the program and may also apply for the use of clean lake funds. In addition, the state may elect to use [illegible] funding in cleaning up the lake.

The responsibility for funding and managing any clean-up activities in Lake Onondaga lies with the State, localities, and local dischargers. As I mentioned earlier, the State has already begun lake characterization and is planning to develop an implementation plan. There is nothing to preclude the State of New York from convening its own Management Conference. The EPA would be happy to assist them in such an effort.

I thank the Subcommittee for the opportunity to be here today to share EPA's views on Lake Onondaga. I would be pleased to answer any questions you might have. Thank you.

WRITTEN TESTIMONY FOR HEARING
ON ONONDAGA LAKE

APRIL 27, 1989

STEVEN W. EFFLER
UPSTATE FRESHWATER INSTITUTE

MY BACKGROUND

I'm a research engineer and scientist for, and member of the board of directors of, the Upstate Freshwater Institute, Inc.(UFI), a not-for-profit research corporation dedicated to freshwater research. I was born and raised in Syracuse. I've been involved in the study of Onondaga Lake since the mid-1970's. This effort has been funded since 1987. My investigations have been interdisciplinary in nature, including the biological, chemical, physical, and engineering aspects of the lake's problems. A listing of my professional contributions that have evolved from these efforts is appended to this testimony. Since 1987 I have served as project manager and as a principal investigator of a multi-institution, interdisciplinary effort to develop water quality models to guide remediation of certain of Onondaga Lake's problems.

MODELING

You are probably aware of the use of "modeling" in various fields, to address a wide range of problems. Basically, models serve to predict the outcomes to specified actions. In the case of water quality, models can be used to predict the change(s) in water quality that would occur as a result of changing the input of various important materials. Models, and thereby their predictions, can only be as good as the information that is used to develop them. Thus in the case of water quality models it is extremely important that they be based on quality scientific and engineering data and analyses. Accurate water quality models can be invaluable management tools in the remediation of impacted systems as they can be used to:

1) establish the feasibility of reaching water quality goals and the upper limit of water quality that can be obtained,

2) guide the selection of the appropriate management alternative by establishing the reduction in material loading necessary to achieve a specified water quality goal, and

3) support cost benefit analyses to examine the desirability of various remediation alternatives.

THE DEGRADED WATER QUALITY OF ONONDAGA LAKE

Onondaga Lake and it's tributaries have been greatly impacted by both domestic and industrial wastes that accompanied the development of the Syracuse area since the late 1800's. The early selection of the lake as the receptacle for waste was an unfortunate one. Presently more than 15% of the water that enters the lake each year is treated sewage from the Metropolitan Sewage Treatment Plant. The inflow from this facility often exceeds the discharge from any other single tributary during the summer. Raw sewage enters the lake during run-off events. Up until the closure of the Allied Chemical facility in early 1986, 5.5 million pounds (or 2750 tons) of ionic waste entered the lake daily from this operation. Approximately 800 thousand pounds per day of this waste continue to enter the lake due to leakage from their waste beds. This same facility released approximately 165,000 lb of mercury to the lake over the period 1946-1970.

The use of the lake for the disposal of wastes has eliminated or greatly impaired other uses of the lake. The pollution of the lake is manifested in almost all of its features. A selective listing of the problems of the lake and its tributaries is presented in Table 1. A number of water quality standards are routinely contravened in the lake. The fishery of the lake is negatively impacted by the:

1) contamination of fish flesh with mercury,
2) low concentrations of oxygen,
3) prevalence of high concentrations of ammonia, and
4) the degraded conditions of the sediments.

Swimming is prohibited because of high concentrations of fecal bacteria and low transparency. The major tributaries to the lake are also greatly impacted. The bottom two miles of Nine Mile Creek, from the waste beds to the lake, is essentially a biological dessert as a result of the industrial sludge that covers the stream bed. Poor esthetic conditions prevail in the lower reaches of Onondaga Creek, where extensive redevelopment is underway, because of high concentrations of suspended solids.

The technical information clearly supports the prevailing public perception that Onondaga Lake is an extremely polluted lake. I am unaware of another lake in the United States that suffers from the myraid of problems that are manifested in Onondaga Lake.

REASONS FOR OPTIMISM

Despite the highly degraded conditions that continue to prevail in the lake, there are some reasons for optimism. First, the lake has demonstrated positive response to recent reductions in material loading. Yet further reductions in material loading will be necessary to reach water quality goals and reclaim related resource uses. A second reason for optimism is the recent initiation of scientific and engineering studies that promise to provide reliable management tools, in the form of mathematical models, to guide the remediation of several of the lake's problems. The problems presently being addressed are indicated in Table 1.

LIMITATIONS: TIME AND SCOPE

It should be recognized that water quality modeling has only recently been embraced by regulators as a valuable management tool for Onondaga Lake. Further, the scope of these recently initiated efforts fails to address a number of the problems of the lake and its tributaries (Table 1). Particularly conspicuous by their absence in on-going studies are the problems of mercury, the interaction between the lake's sediments and water quality, and the sediment load carried by Onondaga Creek. Since the recognition of contamination of fish flesh and the sediments in the early 1970's no systematic evaluation of the cycling of mercury in the lake has been conducted. Further, we must understand and quantify the exchange processes between the lake sediments and the overlying water column to determine the extent to which the sediments will impede the recovery of the lake. The other problems indicated in Table 1 also deserve attention.

A WORD OF CAUTION

Many of the lake's problems (Table 1) interact directly or indirectly. Thus it is important to develop a quantitative understanding of all the interacting components. A management approach that focuses on only one component risks making a short-sighted decision that may subsequently be obviated or even found to be inappropriate. Further, it is extremely important that a high degree of interaction be maintained between the scientists and engineers, involved in model development, and the water quality managers and facility designers, so the models can be designed to best serve the remediation needs of the lake.

TABLE 1. WATER QUALITY RELATED PROBLEMS OF ONONDAGA LAKE AND TRIBUTARIES

PROBLEMS	PRESENTLY UNDER INTENSE INVESTIGATION
LAKE	
1. high concentrations of ammonia	x
2. low transparency	x
-high loading of phosphorus	
-high concentrations of phytoplankton	
3. low concentrations of dissolved oxygen	x
4. high concentrations of fecal coliforms	x
5. mercury contamination	
-fish flesh	
-sediments	
6. sediment releases	
-nutrients	
-toxics	
7. high sedimentation rates	
8. chlorobenzene contamination	
9. ionic enrichment	
10. altered near-shore sediments	
11. altered food chain interactions	
12. impact of lake releases on river quality	
ONONDAGA CREEK	
1. high concentrations of fecal bacteria	
2. high concentrations of suspended solids/"mud boils"	
3. high concentrations of phosphorus	
4. low transparency	
NINE MILE CREEK	
1. deposits	
2. inputs from waste beds	

RESEARCH CONTRIBUTIONS FOR ONONDAGA LAKE

-BY STEVEN W. EFFLER

REVIEWED PUBLICATIONS

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STATEMENT OF HON. MEL ZIMMER, ASSEMBLYMAN, NEW YORK STATE ASSEMBLY

Let me first state that this hearing on Senate 27 is a milestone in and of itself. Several years ago when Senator Moynihan and Mel met to discuss the future of the Lake they agreed that any solution required a cooperative effort from all levels of government. This is the first step on what will be a long and difficult road toward achieving a new life for Onondaga Lake. Those of us who have been involved in the process over the past several decades can attest to the difficulties encountered just in getting people to sit down to discuss the issues. Various groups have worked hard to get things moving, even though each may have had differing specific goals. Now we are focused on a cleanup based on a federal, state, and local partnership. Senator Moynihan sees the goal as Mel does, and our office will be working closely with his to accomplish what this legislation seeks to do.

The establishment of a Conference to oversee the various components is a positive step that will enable realistic goals and timetables to be established. Its use will enable all of the sub groups to be created to focus on specific areas. Then, the use of the expertise of the Army Corps of Engineers, and incidentally its vast resources, to study and recommend which of the strategies is best suited to achieve the goals, will ensure an impartial decision.

We have seen many proposals floated to deal with the Lake. What the ultimate cost will be and how much will actually be accomplished is not now known, and may not be fully known for years. There was a time when those of us interested in making sure that the people of the State have use of this beautiful facility were frustrated by some of the proposals. Recreational lands are being

The legislation, in setting forth the percentages of federal and other financial support for the two stages of the effort, wisely requires participation. The State Legislature will do its part and Mel is also sure that the local governments will do theirs.

The people will be able to monitor the process and approve or disapprove of the plans by the requirement of local government participation. They will be able to respond to any deviation from the intent of the program by dealing with their elected representatives.

In conclusion, Mel and his entire staff would like to express our thanks to all the groups and individuals who have worked with us on, and are still working on, the Lake and its problems. The efforts of the private sector and government agencies involved have been a factor in reaching this stage and Senator Moynihan has now come up with a management framework that will get things from the discussion stage to the implementation stage in a relatively short time. A strong and representative Policy Committee will insure that each level of government is moving in the same direction.

Let me, on behalf of all of us, congratulate Senator Moynihan for his proposal that may, with the cooperation of the others involved, make our dream for a fishable and swimmable, if not drinkable, lake a reality.

You can be sure that Mel will again be personally involved in this effort within a very short time.

Statement

of

Robert J. Congel

Managing Partner

The Pyramid Companies

Before the

Subcommittee on Water Resources, Transportation and Infrastructure

Committee on Environment and Public Works

United States Senate

Syracuse, New York

April 27, 1989

Mr. Chairman and members of the subcommittee, Congressman Walsh, I am Robert J. Congel Managing Partner of The Pyramid Companies of Syracuse, New York.

I thank the subcommittee for the opportunity to submit a statement for the record of today's proceedings and I would also like to extend my sincere gratitude to the distinguished Chairman for introducing the Onondaga Lake Restoration Act of 1989 (S. 27) in the U.S. Senate, and to Congressman Walsh who, I understand, has recently introduced a companion bill in the House of Representatives (H.R. 2068).

Your bipartisan, bicameral effort has created an unprecedented spirit of cooperation between the public and private sectors of this community and has renewed the hope of all Central New Yorkers to reclaim the lake for natural and recreational enjoyment and to foster positive economic change once and for all.

Mr. Chairman, yesterday, as you may know, the Onondaga Lake Advisory Committee (O.L.A.C.) sponsored a day long community conference titled "The Challenge of Salmon 2000," at the Sheraton Inn, in Liverpool, N.Y.

I was asked by the O.L.A.C. Chairman, and one of today's distinguished panelists, Mr. Robert Hennigan, to give the keynote address on the subject of "Lake Restoration and Economic Development." I was not only honored to be among a great cross-section of political leaders, academics and environmentalists -- but I was also personally buoyed by the optimism everyone shared in the goal of reintroducing Atlantic Salmon in the Onondaga Lake waters by the year 2000.

The conference, led by several of today's panelists, was a huge success due in large part to the genuine excitement felt by the participants who really want to make lake restoration a reality.

Mr. Chairman, with your permission and in deference to the other expert panelists testifying from an environmental point of view, I would simply wish to reiterate some of the more pertinent points I made yesterday.

LAKE RESTORATION AND ECONOMIC DEVELOPMENT

I was invited yesterday, to talk about Lake Restoration and Economic Development. I might not know a lot about the specifics of restoring Onondaga Lake -- but I do know a little about economics and making good things happen. I also know that when the public gets excited about something, and unites behind a cause -- government responds and things get turned around. The quality of life improves. I think this is what is occurring with Salmon 2000, Onondaga Lake and the redevelopment of Oil City.

For years very little attention, much less enthusiasm was ever paid to the state of Onondaga Lake or the area we know as Oil City. But sometimes, I think, what an ironic twist of fate. Onondaga Lake becoming "the most polluted lake in the world" will actually have a very positive effect on this community. It got so bad, it's good! Think about it. Not only have we begun to take cleaning it up seriously; but we've also been left with a body of water whose shoreline is almost completely accessible to the public. By comparison, the majority of inland lakes may be cleaner -- but by now their shores are privately owned and public access is severely limited. So, what do you say we go from being known as the "most polluted lake in the world", to "the most accessible lake in the world?" Keep billing it as the worst , that's how you get some attention. Then the transformation will only be more dramatic when we turn it around!

However polluted, Onondaga Lake has shown improvement over the last 10 years - with the sewage treatment plant being built in 1979; Allied closing in '85; the fishery improved enough for DEC to lift the ban: now people view the lake as a positive.

But, we were bogged down. Problems remained, the future was uncertain. A dormant attitude about the lake prevailed among the community and among our political leaders.

From our standpoint, what was sorely needed was a dramatic, but certainly possible, economic initiative to transform the decay of Oil City and the Onondaga Lakefront into one of Central New York's greatest assets - a totally revitalized waterfront. Of course, the phased redevelopment plans are not dependent on the water's quality. And we never assumed that redevelopment would solve the problem of pollution in the lake. But, we did view this redevelopment plan - a $1 billion history making commitment - to be the catalyst, the economic stimulus for the community to rally behind and send a strong signal to our political leaders that we are serious about the future of Syracuse and Central New York.

If I may digress, just for a moment. When we look ahead, toward the economic future of Syracuse and Central New York and what role Onondaga Lake will play in that economic future, we really are only "readjusting" our past view. The fortunes of Onondaga Lake and Syracuse are inseparable.

Just as the lake was the key to nineteenth century Syracuse's growth and development into the "Salt City," today it is again being viewed as the key to the city's revitalization. And this concept is in no way "new". Syracuse, like dozens of waterfront cities in the Northeast and the Nation, have had a history of their water quality being impacted by decades of industrial and municipal pollution. Leaving a legacy of environmental abuse and devastated shorelines in dire need of attention. Ironically, the combination of decline of heavy industry on urban waterfronts and the improved water quality, has led to a rediscovery of the water as a new reservoir of vast potential for improving their economies and again, the quality of life.

As a leading developer in the Northeast, I've seen this firsthand. We have had the good fortune to build major shopping centers in places like Boston and Buffalo. And while we haven't been engaged in any water related development, we found ourselves constantly looking over our shoulders at what was taking place on their waterfronts. Both of these cities have taken what were once huge negatives and turned them into huge positives. And on the way back from Buffalo, just look at what their doing in Rochester. Really, all over, as I travel to Baltimore, Toronto, Cleveland, St. Louis, all have taken the initiative on redeveloping their waterfront and thus stabilizing their economy.

Not surprisingly, this too was all a result of the public demanding change from their government. With the passage of the Clean Water Act, the Federal Government mandated billions of dollars be spent on cleaning up our waterways. This huge investment has paid off by enabling those cities to attract business and private sector development fostering growth instead of decline.

Getting back to Syracuse, we see the same thing happening here. Today, we are taking the initiative to turn a huge negative into a huge positive. When the city of Syracuse and The Pyramid Companies announced plans for the Syracuse Lakefront Project, the response from the community was tremendous. I can't tell you how gratifying we felt by the positive support. It was admittedly, quite surprising. Even with the daunting challenges we face with the environmental quality of Oil City, aging oil tanks, Onondaga Creek and lake pollution, odors from the Metropolitan Sewage Treatment Plant -- this community has demonstrated a remarkable degree of support. And I shouldn't be surprised, because this community shows a tremendous sense of pride in where they live.

It reminds me of Baltimore and how Baltimorians took their city and turned it into a national model of renaissance and urban renewal. The difference was the pride they take in where they live. Buffalo, the same way. Their best advertisers are the people that live there. They take tremendous pride in their community.

Because of this tremendous public support, our political leaders have also responded positively to the public support by providing direction and leadership to our mutual goal of cleaning up Onondaga Lake. Senator Moynihan has pledged his complete support and followed through with his Onondaga Lake clean-up bill. And our congressman -- Jim Walsh -- has also introduced the same bill on the house side. Governor Cuomo along with Senator Tarky Lombardi, Assemblyman Mel Zimmer, the Urban Development Corporation and the Department of Environmental Conservation have all committed the state to doing their part and I know the Salmon 2000 Conference was a direct result of the O.L.A.C. and the D.E.C. taking the initiative to put forth a positive, tangible goal of restoring a fishery to the lake. Hopefully, salmon by the year 2000. Locally, County Executive Nick Pirro and the Onondaga County Legislature have begun to do their part on the lake initiative and I know they will be key to the overall effort. And without Mayor Young and his vision of the future, we may not be testifying here today. Fortunately, our Federal, State and Local representatives have all been responsive toward the goal of a better Syracuse and Central New York and I commend their actions.

Cleaning-up Onondaga Lake is not a just matter of cost. It is a matter of where our priorities are. The Federal government spends $1 Trillion a year, the State almost $50 Billion a year. The money is there; what it becomes is a matter of focusing our federal, state and local representatives on our priorities. We are grateful that

Senator Moynihan and this Committee shares our priorities for Onondaga Lake. Onondaga Lake is and has to be our priority. But we have to make it happen and our main objective for the future must be to continue to support those who are in there fighting for our lake and our community.

The Syracuse Lakefront project will change the face of this community forever. I feel extremely privileged to play a small part in the revitalization effort and extremely fortunate not only as a businessman, but as a fellow Syracusan, to help foster something as positive as the Lakefront Development can and will be in our economic future.

While the overall project development will act as a catalyst for the lake clean-up; it has already produced additional side benefits by providing the rare environmental opportunity to clean-up the hazardous waste left behind in Oil City. Hopefully, it will become the vehicle to rid the entire lakeshore of all hazardous waste. In the end a clean lake and shoreline will be the catalyst that drives the future development of our lakefront and the goal of a swimmable and fishable resource.

Today, one thing is certain. The good news is clearly outdistancing the bad these days with Onondaga Lake. And the best is yet to come.

The most important thing is to keep the enthusiasm and support high. And I pledge my continued support throughout the 1990's and beyond to the goals of swimmable and fishable waters, Salmon 2000, and a community we can all be proud of!

Thank you, Senator Moynihan for the commitment you have shown our community.

II

101ST CONGRESS
1ST SESSION

S. 27

To establish a federally sponsored program for the restoration, conservation, and management of Onondaga Lake in Onondaga County, New York, and to provide for the sharing of costs of such cleanup, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JANUARY 25 (legislative day, JANUARY 3), 1989

Mr. MOYNIHAN introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To establish a federally sponsored program for the restoration, conservation, and management of Onondaga Lake in Onondaga County, New York, and to provide for the sharing of costs of such cleanup, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. TITLE.

This Act may be cited as the "Onondaga Lake Restoration Act of 1989".

SEC. 2. FINDINGS.

The Congress finds that—

(a) Onondaga Lake has for many years received sewage discharge from a variety of sources, including numerous combined sewer outfalls, which can discharge raw sewage into the lake as many as one hundred times per year;

(b) Onondaga Lake has received industrial discharges of mercury, chlorine, sodium, carbonate ions, calcium, benzene, sodium hyperchloride, various petroleum distillates and other chemical pollutants since the late nineteenth century;

(c) there are restrictions on the consumption of fish taken from Onondaga Lake because of elevated mercury levels in fish flesh;

(d) existing waste beds in the Towns of Geddes and Camillus still contribute many tons of contaminants to the lake per year through runoff and infiltration;

(e) Onondaga Lake borders directly on New York's fifth largest city, and has the potential of being a central part of the economic and recreational activity for the city of Syracuse, Onondaga County, and central New York;

(f) the number, variety, and mixture of sources of pollution in Onondaga Lake is unique for bodies of fresh water of comparable size in the United States;

(g) pollution from Onondaga Lake flows into the Oswego River and is a potentially major source of pollution to Lake Ontario and the Saint Lawrence River.

SEC. 3. PURPOSE.

It is the purpose of this Act to formulate and implement a cooperative program for the restoration, conservation, and management of Onondaga Lake in Onondaga County, New York. This plan shall build on the efforts undertaken to date by the State of New York, Onondaga County, the Central New York Regional Planning and Development Board, the Onandaga Lake Advisory Committee, other public entities and private individuals and businesses, and shall coordinate all activities undertaken to clean up the lake.

SEC. 4. GENERAL PROVISIONS.

Title III of the Federal Water Pollution Control Act is hereby amended by adding a new section 321, as follows:

"SEC. 321. ONONDAGA LAKE RESTORATION PROGRAM.

"(a) CONVENING OF CONFERENCE.—The Administrator shall convene a management conference for the restoration, conservation, and management of Onondaga Lake. The purpose of the management conference convened with respect to this subsection shall be to—

"(1) catalog and evaluate all existing research and information regarding lake conditions;

"(2) assess the need for ongoing research regarding the lake and assure that such research is carried out as expeditiously as possible;

"(3) coordinate with all ongoing research and modeling efforts in an attempt to gather all information needed to formulate a comprehensive restoration, conservation, and management plan for the lake;

"(4) develop a comprehensive restoration, conservation, and management plan that recommends priority corrective actions and compliance schedules addressing point and non-point sources of pollution to restore and maintain the chemical, physical, and biological integrity of the lake, including an assessment of the feasibility and desirability of projects to assure that—

"(A) there is sufficient dissolved oxygen in lake water to allow fish to survive, reproduce and flourish;

"(B) presence of mercury in the lake is reduced to the extent that fish taken from the lake can be consumed without threat to health;

"(C) discharge of untreated sewage into the lake is reduced to negligible levels;

"(D) high phytoplankton levels and other sources of turbidity in the lake are reduced to the extent that lake water can meet the standard of 1.22 meter average visibility;

"(E) concentrations of fecal coliform and other bacteria are reduced to the extent that swimming in the lake is permissible and does not pose a threat to health.

"(5) coordinate implementation of the plan by the State of New York, the Environmental Protection Agency and all local agencies, governments and other groups participating in the conference under existing authorities, and recommend additional authority that should be granted to the management conference or to any of its participants that will aid in the execution of the plan agreed upon by the management conference;

"(6) monitor the effectiveness of actions taken pursuant to the plan and recommend modifications to the plan should they be necessary; and

"(7) review all Federal financial assistance programs and Federal development projects in accordance with the requirements of Executive Order 12372, as in effect on September 17, 1983, to determine whether such assistance program or project would be consistent with and further the purposes and objectives of the plan prepared under this section. For purposes of paragraph (7), such programs and projects shall not be limited to the assistance programs and development projects subject to Executive Order 12372, but may include any programs listed in the most recent Catalog of Federal Domestic Assistance which may have an effect on the purposes and objectives of the plan developed under this section.

"(b) MEMBERS OF CONFERENCE.—The members of the management conference convened under this section shall include, at a minimum, the Administrator and a representative of—

"(1) the Governor of the State of New York;

"(2) the Assistant Secretary of the Army for Civil Works;

"(3) Onondaga County;

"(4) The city of Syracuse;

"(5) a Technical Advisory Committee to be convened by the management conference to provide advice and assistance concerning the technical and scientific aspects of the plan; and

"(6) a Citizens Advisory Committee to be convened by the management conference.

"(c) UTILIZATION OF EXISTING DATA.—In developing a plan under this section, the management conference shall survey and utilize existing reports, data, and studies relating to the lake that have been developed by or made available to Federal, interstate, State, and local agencies.

"(d) APPROVAL AND IMPLEMENTATION OF PLANS.—

"(1) APPROVAL.—Not later than one hundred and twenty days after the completion of a restoration, conservation and management plan and after providing for public review and comment, the Administrator shall approve such plan if the plan meets the requirements of this section and the Governor of the State of New York concurs.

"(2) IMPLEMENTATION.—Upon approval of a conservation and management plan under this section, such plan shall be implemented. Funds authorized to be appropriated under titles II and VI and section 319, and this section of this Act may be used in accordance with the applicable requirements of this Act to assist States with the implementation of such plan.

"(e) GRANTS.—

"(1) RECIPIENTS.—The Administrator is authorized to make grants to State, interstate, and regional water pollution control agencies and entities, State lake management agencies, interstate agencies, other public or nonprofit private agencies, institutions, organizations, and individuals.

"(2) Grants under this subsection shall be made to pay for—

"(A) assisting research, surveys, studies, and modeling and other technical work necessary for the development of a restoration, conservation and management plan under this section, provided that the amount of grants to any person (including a State, interstate, or regional agency or entity) under this paragraph for a fiscal year shall not exceed 75 percent of the costs of such research, survey, studies, and work and shall be made on condition that the non-Federal share of such costs are provided from non-Federal sources;

"(B) conducting activities identified in the plan developed pursuant to this section for the restoration, conservation and management of Onondaga Lake, provided that the amount of grants to any person (including a State, interstate, or regional agency or entity) under this paragraph for a fiscal year shall not exceed 55 percent of the costs of such work and shall be made on condition that the non-Federal share of such costs are provided from non-Federal sources.

"(f) GRANT REPORTING.—Any person (including a State, interstate, or regional agency or entity) that receives a grant under subsection (g) shall report to the Administrator not later than eighteen months after receipt of such grant and biennially thereafter on the progress being made under this section.

"(g) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to the Administrator not to exceed $17,000,000 per fiscal year for each of fiscal years 1989, 1990, 1991, 1992, 1993, and 1994 for—

"(1) expenses related to the administration of management conferences under this section, not to exceed 5 percent of the amount appropriated under this subsection;

"(2) making grants under subsection (g); and

"(3) monitoring the implementation of a conservation and management plan by the management conference or by the Administrator, in any case in which the conference has been terminated."

SEC. 5. ROLE OF THE ARMY CORPS OF ENGINEERS.

The Assistant Secretary of the Army for Civil Works is directed to undertake a study to assess the cost, feasibility, probable duration, and effectiveness of various strategies for the reduction of pollutant and nutrient input into Onondaga Lake. The Assistant Secretary shall cooperate to the fullest extent possible with the State of New York, Onondaga County, the city of Syracuse and other interested parties in establishing a list of alternatives to be assessed, and descriptions of the individual projects. No later than eighteen months after the date of enactment of this Act, the Assistant Secretary shall submit a report to Congress and to the Management Conference convened under section 321 of the Federal Water Pollution Control Act as amended that includes the findings of this study. This report shall recommend which projects and techniques will offer the greatest benefits for the cleanup of the Lake, and which are the most cost effective.

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